

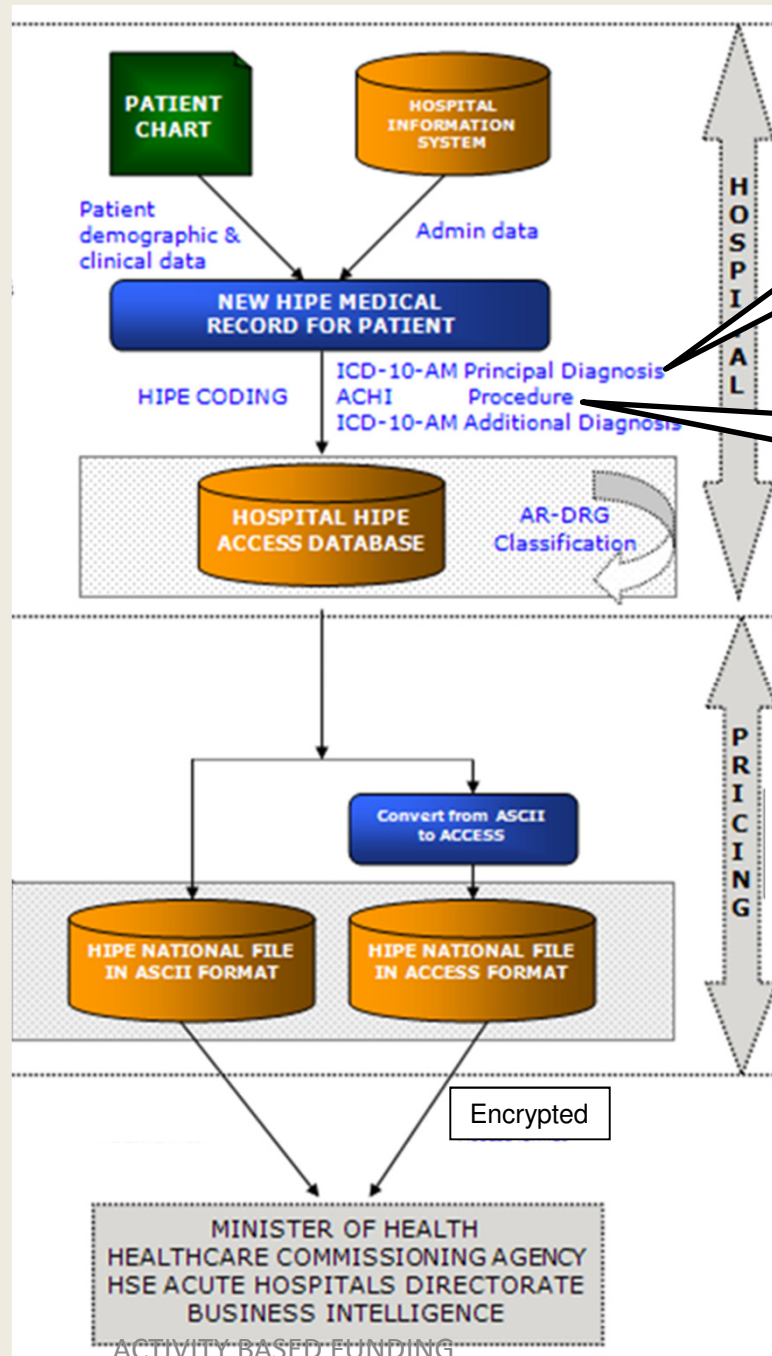


# Understanding the Surgical Workload and its Funding

## ACTIVITY BASED FUNDING

1. Providers are funded based on the activity they undertake.
2. 'Casemix funding' is also used = 'mix of cases' that a health service treats.
3. A health system produces more than treated cases, and includes maintaining the health of people at home, prevention, teaching, research etc
4. For this reason, no health system in the world is funded solely on the basis of its 'casemix'.
5. Hospital activity is counted by 'episode of care'- from admission to discharge
6. The financial incentive is to minimise the cost of each episode of care
7. Inevitably rewards the shortest length of stay in a hospital bed
8. This raises concerns that patients will be discharged too soon.
9. These concerns can be overcome if patient outcomes are measured
10. These concerns can be overcome if there is continuity of care between the hospital and home.

# The ABF Patient Record Journey



**16,708**

HIPE  
30/admission

**6,662**

HIPE  
20/admission

*Who sets the price?*

28/05/2015

# DRG codes

## Step 1: Major Diagnostic Category (MDC) code

- 23 body systems
- A = complex – Transplant, prolonged ICU

MDC	MDC name
00	Unassignable to MDC
01	Nervous system
02	eye
03	Ear, Nose, Mouth and Throat
04	Respiratory System
05	Circulatory system
06	Digestive system
07	Hepatobiliary system and pancreas
08	Musculoskeletal system and connective tissue
09	Skin, Subcutaneous tissue and breasts
10	Endocrine, nutritional and metabolic
11	Kidney and urinary tract
12	male reproductive system
13	femal reproductive system
14	Pregnancy, Childbirth and the Puerperium
15	Newborns and other neonates
16	Blood, Blood forming organs, immunological
17	Neoplastic (haematological and solid neoplasms)
18	Infectious and parasitic diseases, systemic or unspecified sites
19	Mental diseases
20	Alcohol / drug use / induced organic mental disorders
21	Injuries, poisonings and toxic effects of drugs
22	Burns
23	Factors influencing health Status and other contact with health service

## Step 3: Complexity

A = most complex ...

D = least complex  
(or Z – same price regardless)

698 DRGs in Ireland

HIPE finalised data file, 2013				Avg Rel
DRG / Procedure	# Patients	AvLOS	Cmplxty	
OPEN CHOLECYSTECTOMY-CDE-CCC (H07B)	210	7.49	6.47	
Lap cholecystectomy proceed open chole (3044600)	120	6.82	6.80	
Cholecystectomy (3044300)	90	8.38	6.02	

HIPE finalised data file, 2013			
DRG / Procedure	# Patients	AvLOS	Avg Rel Cmplxty
MJR SMALL & LARGE BOWEL PR-CCC (G02B)	1,480	11.28	7.27
Right hemicolectomy with anastomosis (3200301)	403	9.86	8.14
Limited excision lrg intestine w anstms (3200300)	171	9.70	6.80
Resec small intestine w anastomosis (3056600)	169	12.51	4.97
Left hemicolectomy with anastomosis (3200600)	93	9.83	8.14
Temporary colostomy (3037528)	71	12.18	6.47
Extended right hemicolectomy w anstms (3200501)	55	11.67	8.14

**DRGS ARE FOR FUNDING AND NOT FOR  
CLINICIANS MEASURING THEIR ACTIVITY  
THIS IS DONE BY HIPE**

Subtotal colectomy w anstms (3200500)	26	12.42	11.43
Left hemicolectomy w stoma formation (3200601)	19	16.53	8.14
Total colectomy w ileorectal anastomosis (3201200)	18	11.11	11.43
Other repair of small intestine (3037519)	18	8.06	5.58
Right hemicolectomy w stoma formation (3200001)	17	14.82	8.14
Laparoscopy (3039000)	16	17.38	4.24
Resec small intestine w formation stoma (3056500)	16	21.44	6.02
Other colostomy (3037504)	14	11.57	6.47

# NCPS Mapping of Surgical Procedures

Our analysis:

- By patient episode, by primary procedure
- Procedures\* (mainly **PRIMARY**) drive surgical DRGs and ABF
- Procedures > 20 in any one year in all surgery (2010, 2011, 2012, 2013)

*Excluding procedures < 10 in 2013*

Number of procedures by Surgical Specialty		
	Surgical Specialty	2013 Count
BREAST	Breast Surgery	16
CARDTO	Cardiothoracic	34
COLORC	Colorectal	49
GENERL	General Surgery	102
GYNEAC	Gynaecology	87
MXFDNT	Maxillo-facial & Dental	39
NEUROS	Neurosurgery	35
OBSTET	Obstetric	33
OPHTHA	Ophthalmology	73
OTOLAR	Otolaryngology	87
PAEDIA	Paediatric Surgery	16
PLASTC	Plastic Surgery	77
TOLWRL	Lower Limb Trauma Orthopaedic	103
TORTHO	Trauma Orthopaedic	26
TOSPIN	Spinal Trauma Orthopaedic	19
TOUPRL	Upper Limb Trauma Orthopaedic	84
UGIHPB	Upper Gastrointestinal & Hepato-biliary	21
UROLOG	Urology	75
VASCUL	Vascular	36
XENSCP	Endoscope	39
XNOSRG	Non-Surgical procedure	684
Total count of Procedures		1,735

>98%

## Patients who had an **Above Knee Amputation** (4436700) during a single admissions in 2012

Num Patients	Avg num procs	Num Vasc Procs	PRIMARY	1st Proc	2nd Proc	3rd Proc	4th Proc
1	18.0	3		Femoro-femoral crossover bypass	PTA perc w stenting, single stent	Amputation above knee	
1	14.0	2		Fem-pop bypass usg synthc matrl abv knee	Amputation above knee		
2	8.0	2		Embolectomy/thrombectomy, femoral artery	Amputation above knee		
1	16.0	2		Embolectomy/thrombectomy, popliteal art	Amputation above knee		
1	10.0	2		Perc transluminal balloon angioplasty	Amputation above knee		
1	16.0	3		Amputation toe including metatarsal bone	Amputation above knee	PTA perc w stenting, single stent	
114	7.0	1		Amputation above knee			
1	15.0	2		Amputation above knee	Fem-pop bypass usg synthc matrl abv knee		
2	16.0	2		Amputation above knee	Endarterectomy of extremities		
1	20.0	3		Amputation above knee	Endarterectomy of extremities	Embolectomy/thrombectomy, femoral artery	
1	18.0	3		Amputation above knee	Embolectomy/thrombectomy, femoral artery	PTA perc w stenting, single stent	
1	18.0	3		Amputation above knee	Embolectomy/thrombectomy, femoral artery	Reamputation of amputation stump	
1	7.0	2		Amputation above knee	Embolectomy/thrombectomy, popliteal art		
6	13.2	2		Amputation above knee	Perc transluminal balloon angioplasty		
2	16.5	2		Amputation above knee	PTA perc w stenting, single stent		
1	13.0	2		Amputation above knee	PTA perc w stenting, multiple stents		
1	20.0	3		Amputation above knee	Amputation of toe	Femoral vein bypass	
1	17.0	3		Amputation above knee	Amputation of toe	Amputation toe including metatarsal bone	
1	18.0	2		Amputation above knee	Amputation toe including metatarsal bone		
1	16.0	3		Amputation above knee	Amputation below knee	Embolectomy/thrombectomy, femoral artery	
2	13.5	3		Amputation above knee	Amputation below knee	Perc transluminal balloon angioplasty	
1	14.0	2		Amputation above knee	Reamputation of amputation stump		
1	20.0	3		Amputation above knee	Reamputation of amputation stump	Perc transluminal balloon angioplasty	
1	14.0	3		Amputation above knee	Reamputation of amputation stump	PTA perc w stenting, multiple stents	
6	13.5	2		Amputation below knee	Amputation above knee		
1	16.0	3		Amputation below knee	Amputation above knee	Perc transluminal balloon angioplasty	
1	20.0	4		Amputation below knee	Amputation above knee	Perc transluminal balloon angioplasty	PTA perc w stenting, single stent
1	13.0	3		Embolectomy/thrombectomy of other artery	Amputation above knee	Amputation below knee	
155	9.0						

**HIPE CAN COLLECT  
UPTO 30 DIAGNOSES  
& 20 PROCEDURES**

## Multiple Procedure Example

Hospital	XXX			
DchgDt	25/10/2012	Transfer to external rehab facility		
AdmDt	01/02/2012	Acute		
Sex	Female			
AreaRes	XXX			
Age	65			
DRG	F08A	MJR RECONSTRC VASC PR-PUMP+CCC		
LOS	267			
Spclty	0900	Geriatric medicine		

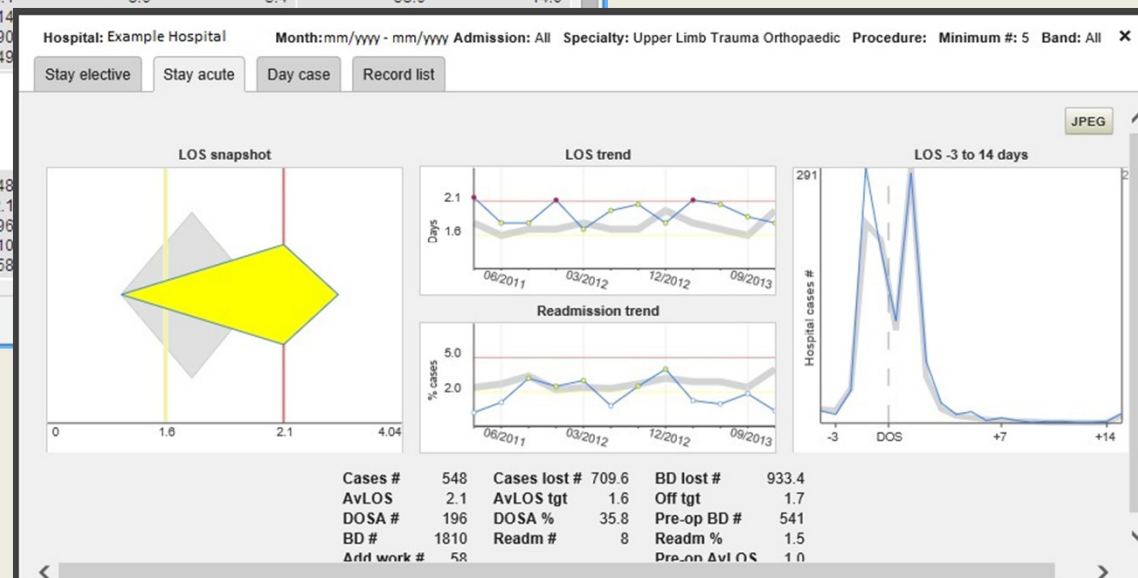
Proc Code	Date	Description	
4436700	19/04/2012	Amputation above knee	8
9251499	19/04/2012	General anaesthesia, ASA 99	8
4433800	16/02/2012	Amputation of toe	2
9251499	16/02/2012	General anaesthesia, ASA 99	2
3480900	09/02/2012	Femoral vein bypass	1
9251499	09/02/2012	General anaesthesia, ASA 99	1
3863700	16/02/2012	Reop for recon coronary artery graft	3
9251499	16/02/2012	General anaesthesia, ASA 99	3
3022302	24/02/2012	Other incision & drainage of SSCT	4
9251499	24/02/2012	General anaesthesia, ASA 99	4
3022302	13/03/2012	Other incision & drainage of SSCT	6
9251499	13/03/2012	General anaesthesia, ASA 99	6
3830601	19/04/2012	Perc ins mult trnsml stnt sgl coron art	8
9251499	19/04/2012	General anaesthesia, ASA 99	8
1370602	26/04/2012	Administration of packed cells	9
3047301	06/03/2012	Panendoscopy to duodenum with biopsy	5
9251599	06/03/2012	Sedation, ASA 99	5
3047301	10/07/2012	Panendoscopy to duodenum with biopsy	10
9251599	10/07/2012	Sedation, ASA 99	10
9090105	06/04/2012	Magnetic resonance imaging of abdomen	7



# NQAIS Surgery

Web enabled  
interactive  
reporting tool

Using your own  
hospital's HIPE data



## HOW ABF WILL DRIVE CLINICAL PRACTICE

1. BY IMPROVING EFFICIENCY AND QUALITY OF CARE BY SETTING APPROPRIATE TARIFFS
2. BY CORRECTING PERVERSE INCENTIVES - DAY v INPATIENT ACTIVITY
3. BY FUNDING CARE IN CORRECT SETTING - AMBULATORY CARE
4. BY INCENTIVISING SHORTENED AVLOS
5. BY INCENTIVISING BETTER CARE
6. BY MANAGING INAPPPROPRIATE GEOGRAPHIC VARIATION
7. BY LIMITING OVER INVESTIGATION AND OVER TREATMENT

# LAP CHOLECYSTECTOMY-CDE-CSCC (H08B)

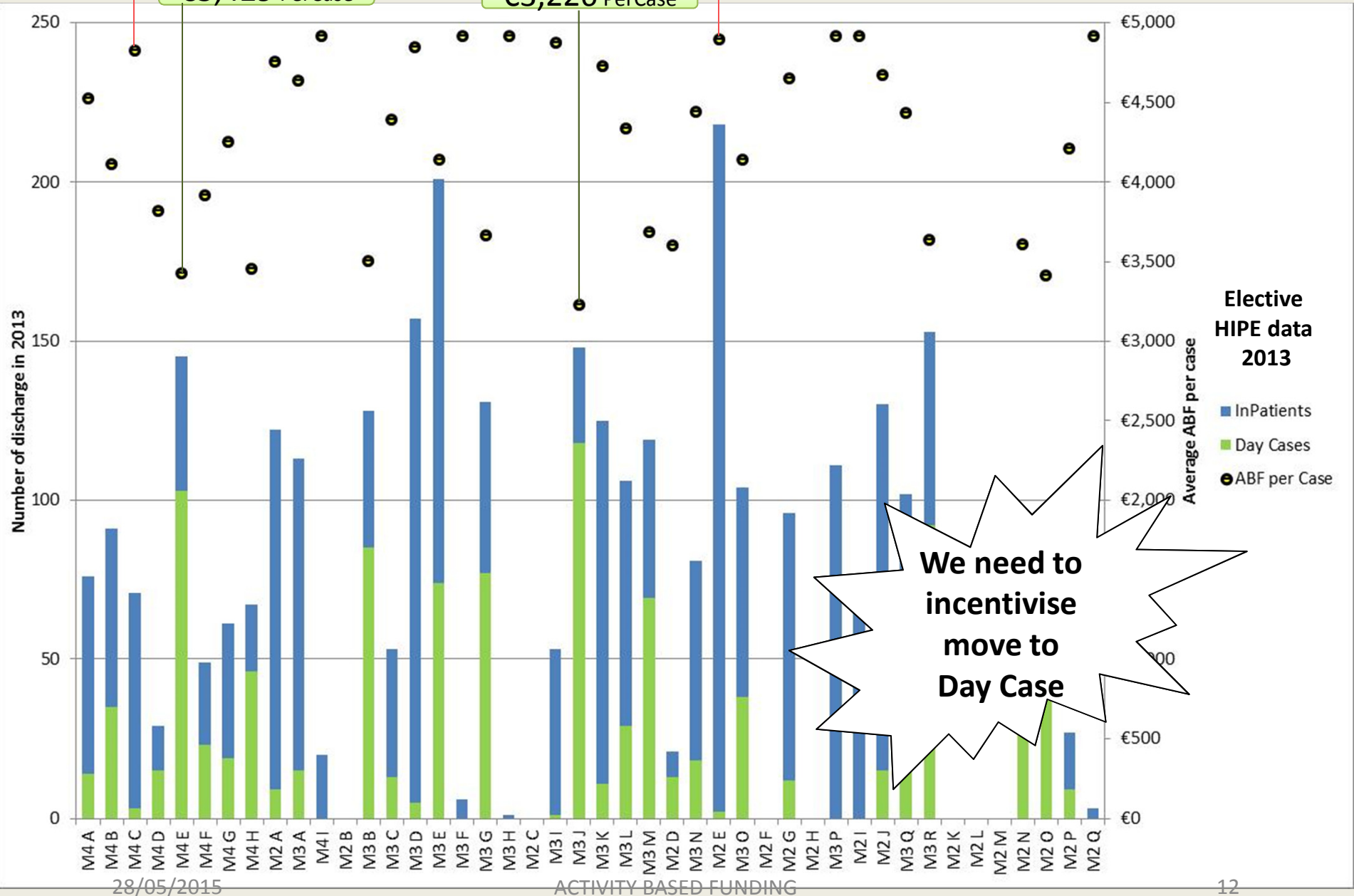
National target 60%

€4,826 PerCase

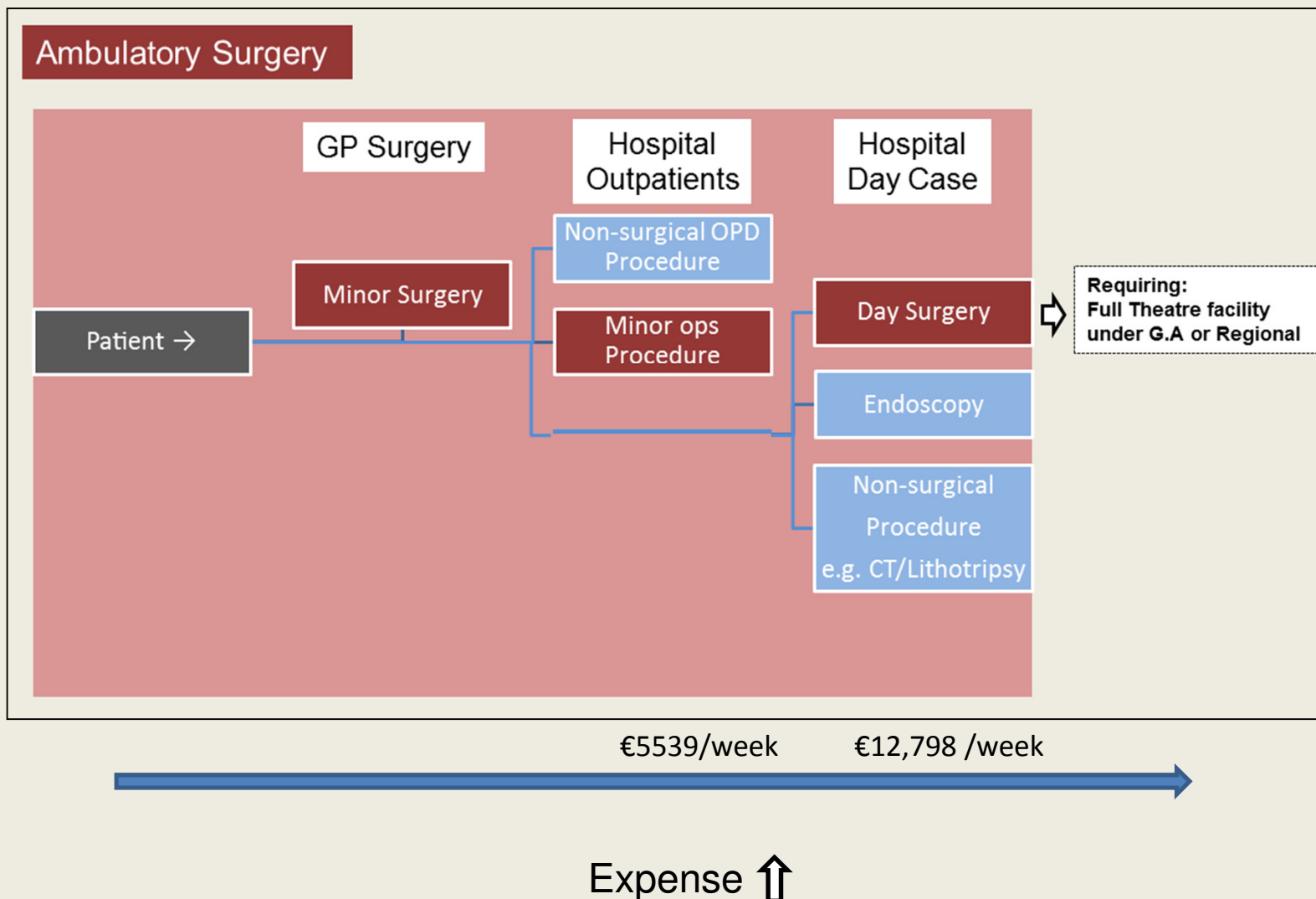
€3,429 PerCase

€3,226 PerCase

€4,896 PerCase

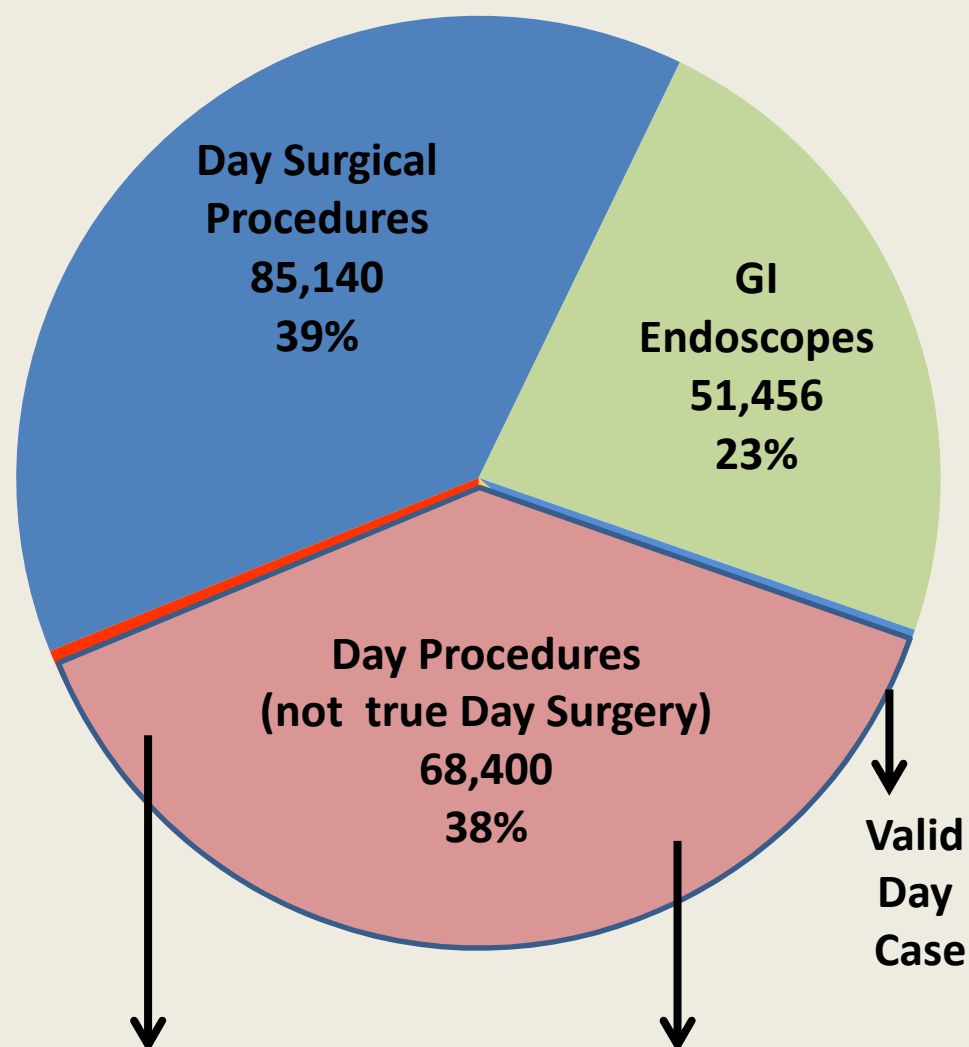


## BY FUNDING CARE IN CORRECT SETTING - AMBULATORY CARE



## Examining 2012 Surgical Day Case Activity

N= 208,996



### OUT PATIENTS

- Examination of the Eye
- Nasoendoscopy
- Aspiration of breast
- Fine needle biopsy of breast
- Rigid sigmoidoscopy
- Sclerotherapy for haemorrhoids
- Ear toilet, unilateral
- Papanicolaou smear study
- Micro injections of venular flares

### MINOR OPS – SIDE ROOM

- Removal of toenail or in-growing toenail
- Biopsy of skin & subcutaneous tissue
- Excision of lesion(s) SSCT, foot
- Biopsy of tongue
- Biopsy of oral cavity
- Removal of wart

28/05/2015  
Should be done as Day Cases. Funding should reflect the correct site

ACTIVITY BASED FUNDING

## BY INCENTIVISING BETTER CARE - Hip Fracture

### KPI – Surgery within 48 Hours

### Transfers – Acute Hip fracture operations in receiving hospital

Transferred from Acute Hospital / HIPE hospital list or from non-Acute Hospital (Admit source 3 or 4)										
HIPE 2013 data	Admitted direct			Transfer from other Hospital			Total			% Transfer from Hsptl
Operating Hospital	# Patients	BDU	AvLOS	# Patients	BDU	AvLOS	# Patients	BDU	AvLOS	
AMNCH Tallaght										16.4%
BEAUMONT HOSPITAL, DUBLIN										2.1%
CONNOLLY HOSPITAL, BLANCHARDSTOWN										0.0%
CORK UNIVERSITY HOSPITAL										1.8%
KERRY GENERAL HOSPITAL										0.0%
LETTERKENNY GENERAL										0.9%
MATER MISERICORDIAE, DUBLIN										1.5%
MAYO GENERAL HOSPITAL										0.0%
MIDLAND REGIONAL HOSPITAL, TULLAMORE										5.0%
OUR LADY OF LOURDES, DROGHEDA										30.0%
REGIONAL (UCHG), GALWAY										3.8%
REGIONAL, (DOORADOYLE) LIMERIC										5.1%
SLIGO GENERAL HOSPITAL										0.0%
ST. JAMES'S HOSPITAL, DUBLIN										1.5%
ST. VINCENTS UNIVERSITY HOSPITAL										0.3%
TEMPLE ST. CHILDREN, DUBLIN										0.0%
WATERFORD REGIONAL (ARDKEEN)										35.5%
Grand Total										10.0%

## BY MANAGING INAPPPROPRIATE GEOGRAPHIC VARIATION

Extraction of Cataract w or wo implant - Lens procedures (C16Z)	
<b>Elective 2013 Discharged to</b>	<b>Cases Per 000's Pop</b>
City / County 01	9.21
City / County 02	3.96
City / County 03	3.96
City / County 04	3.30
City / County 05	2.92
City / County 06	2.82
City / County 07	2.56
⋮	
City / County 21	1.78
City / County 22	1.78
City / County 23	1.52
City / County 24	1.45
City / County 25	1.45
City / County 26	1.42
City / County 27	1.40
City / County 28	1.21
City / County 29	1.17
City / County 30	0.99
City / County 31	0.88
Ireland Total	1.98
HIPE 2013 data	

4.7 times  
national avg

Tonsillectomy without adenoidectomy - TONSILLECTOMY, ADENOIDECTOMY (D11Z)	
<b>Elective 2013 Discharged to</b>	<b>Cases Per 000's Pop</b>
City / County 01	0.82
City / County 02	0.80
City / County 03	0.77
City / County 04	0.59
City / County 05	0.57
City / County 06	0.51
City / County 07	0.46
⋮	
City / County 20	0.26
City / County 21	0.26
City / County 22	0.21
City / County 23	0.20
City / County 24	0.20
City / County 25	0.20
City / County 26	0.20
City / County 27	0.20
City / County 28	0.19
City / County 29	0.16
City / County 30	0.13
City / County 31	0.03
Ireland Total	0.31
HIPE 2013 data	
for Adults only (16 & Over)	

2.6 times  
national avg

BY LIMITING OVER INVESTIGATION AND OVER TREATMENT

# THE NEW YORKER

## ANNALS OF HEALTH CARE



MAY 4, 2015

### OVERKILL

BY ATUL GAWANDE

Millions of people get tests, drugs, and operations that won't make them better, may cause harm, and cost billions.

<http://www.newyorker.com/magazine/2015/05/11/overkill-atul-gawande>