

Activity Based Funding – Hospital Level Reports Mark O'Connor – Head of Costing PCSI 29th May 2024

First ABF Adjustment since 2021 (2019 data)

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 DRG value 	€ 100,000,000
 Agency co-payment 	€ 1,000,000
 Oncology 	€ 3,000,000
ABF Value	€ 104,000,000
 ABF Cost 	€ 100,000,000
 ABF Gap 	€ 4,000,000

- Example Benchmarking in Action
 - A hospital spent €100m on activity valued at €104m by the ABF Model
 - Transition adjustment was 85% meaning hospitals are exposed to 15% of the gap which was applied to 2024 budget
 - ABF Budget Adjustment €600,000 (€104M €100M = €4M * 0.15)
 - Transition Moving next year to 80% (20% Exposure) Adjustment would be €800,000



- COVID-19 drops in activity some hospitals have recovered to pre-pandemic levels faster than others
- Additional budget
- Additional WTEs
- Additional beds and activity
- Significant increases in ICU beds
- Changes in ward use AMAUs being used as normal wards



How did that happen?

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Reports issued as an aid to understanding position

- · Relates to 2022 costs and activity
- · Reports are an aid to understanding ABF Performance which is impacted by many factors including
 - Total Spend
 - · How accurately that spend is costed to services
 - · Volume of cases treated
 - Coding completeness
 - · Coding quality
 - Average length of stay (ALOS)

The reports contain an explanation of hospital's performance under these headings together with details of changes in this year's model which include

- · Grouping hospitals into Model types
- Admitted Patient Weighted Unit (APWU)
- Update from Version 8 to Version 10 DRG Grouper.
- ABF remains budget neutral Zero Sum
- Means hospitals are affected by others as well as their own performance within each Model type



Data on Costing Website

Activity Based Funding

Documentation related to Activity Based Funding Benchmarking

Table Of Conte	ents	
Link	Media Format	Description
Click Here	Excel	2022 ABF Benchmarking Results - Summary 🖌 🛧 New
Click Here	Excel	2022 2024 ABF Benchmarking Results based on 2022 Activity and Costs 🛛 🌪 New
Click Here	Excel	2022 ABF Benchmarking 2022 v 2019 🖌 New

- · ABF Benchmarking Results
 - Showing cases, CMI, APWU, ABF Costs, co-payments, DRG and ABF value, Outturn, Out-turn after transition
- The Benchmarking File detailing all hospitals.
 - Cases, APWU and CMI for overnight/same day/day case, costs, value, co-payments, uncoded cases and 'penalty', cost per APWU
- · Data showing movement from 2019 to 2022

Total Cost, Revenue and Adjustment vs Relevant Model and ABF Total

Overview	My hospital	Model 3	ABF
DRG Value	€70,000,000	€1,676,465,496	€5,327,864,846
Oncology Co-Payment	€1,000,000	€49,309,877	€195,570,146
Agency Co-Payment	€2,000,000	€25,635,075	€45,198,559
ABF Value	€73,000,000	€1,751,410,448	€5,568,633,551
ABF Cost	€70,000,000	€1,751,410,448	€5,568,633,553
Benchmarking Position [ABF Value less ABF Cost]	€3,000,000	€0	€0
Budget Adjustment @ 85% Transition	€450,000	€0	€0
*ABF is a zero sum adjustment within each hospital model and overall at ABF level.			
Uncoded Cases	1,548	1,548	8,761
Uncoded Penalty Estimate	€1,170,593	€1,170,593	€14,132,230





Uncoded 'Penalty'

- Uncoded cases have no DRG
- DRG drives ABF Value
- Despite this the HPO imputes an estimated value for uncoded cases is based on 80% of the average weighted units by day case, same day and overnight and a new factor of maternity (yes/no) for this hospital from the latest available closed full year HIPE file. The gap between 100% and 80% is the estimated 'penalty' for uncoded cases.
- In mature ABF systems uncoded cases would receive no value and HPO is reducing the imputed value



Activity	My hospital	Model 3	ABF
Inpatient Overnight Cases	10,000	193,791	473,641
Inpatient Same Day Cases	2,000	59,296	126,708
Elective Day Cases	8,000	272,472	1,025,783
Total Cases	20,000	525,559	1,626,132
Inpatient Overnight % of Admitted Cases	50%	37%	29%
Inpatient Same Day % of Admitted Cases	10%	11%	8%
Elective Day Case % of Admitted Cases	40%	52%	63%
Total	100%	100%	100%
Inpatient Overnight Admitted Patient Weighted Units	22,000	434,726	1,344,553
Inpatient Same Day Admitted Patient Weighted Units	200	8,833	27,569
Elective Day Case Admitted Patient Weighted Units	1,500	77,476	285,191
Total Admitted Patient Weighted Units	23,700	521,035	1,657,312
Inpatient Overnight % of Admitted Patient Weighted Units	93%	83%	81%
Inpatient Same Day % of Admitted Patient Weighted Units	1%	2%	2%
Elective Day Case % of Admitted Patient Weighted Units	6%	15%	17%
Total	100%	100%	100%
Inpatient Overnight CMI	2.20	2.24	2.84
Inpatient Same Day CMI	0.10	0.15	0.22
Elective Day Case CMI	0.19	0.28	0.28
Total CMI	1.19	0.99	1.02





Admitted Patient Weighted Units

- When the EURO was introduced
 - IEP 0.787564 = €1
 - German DM 1.95583 = €1
 - So now we can see how much more expensive a Big Mac is in Ireland v Germany
 - We can compare the cost of a fillet steak in Ireland to a schnitzel in Munich!
 - So now weighted units are directly comparable between IP and DC







Patient type	Old currency	New currency	Model 4
Day case	0.82	0.22	0.26
Overnight	1.77	4.00	3.51
Same day	0.25	0.56	0.39
ABF		0.97	1.05



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Beds

Metrics	My hospital	Model 3	ABF
ABF Cost	€70,000,000	€1,751,410,448	€5,568,633,553
Beds [BIU]	203	4,835	13,666
ABF Cost Per Admitted Patient Weighted Unit	€2,954	€3,361	€3,360
Variance (%)		-12%	-12%
ABF Cost Per Bed	€344,828	€362,236	€407,481
Variance (%)		-5%	-15%
Admitted Patient Weighted Units Per Bed	117	108	121
Variance (%)		8%	-4%

• 2024 we will be looking at beds vs activity vs value

Cost Bucket	My hospital	Model 3	ABF
Medical Pay Cost Bucket Admitted Care	€10,000,000	€260,607,145	€812,022,543
Medical Pay Cost Bucket Admitted Care per Admitted Patient Weighted Unit	€422	€500	€490
Variance (€)		-€78	-€68
Variance (%)		-16%	-14%
Ward Nursing Cost Bucket Admitted Care	€15,000,000	€365,345,473	€975,706,424
Ward Nursing Cost Bucket Admitted Care per Admitted Patient Weighted Unit	€633	€701	€589
Variance (€)		-€68	€44
Variance (%)		-10%	8%



 $\int z$ Average length of stay review

- DRGs similar patients/resource usage and LOS
- · Let's compare LOS across each DRG and do it within Model type

		Total Model	3 Hospitals			M	y hospital	
DRG V10	DRG V10 Description	Cases	ALOS	Cases	ALOS	ALOS Variance v Model 3 Average	ALOS % Variance v Model 3 Average	LOS Variance v Model 3 Average (Bed Days)
A14A	VENTILATION >=96&<336HRS, MAJC	46	97.1	6	59.8	-37.3	-38%	-224
E67B	RESP SIGNS & SYMPTOMS, MINC	1,806	2.3	423	1.7	-0.5	-23%	-221
B63B	DMNTIA&CHRNIC DIST CBL FN, MINC	497	19.6	26	13.2	-6.4	-33%	-168
F73A	SYNCOPE & COLLAPSE, MAJC	1,259	10.3	94	8.6	-1.6	-16%	-152
A14C	VENTILATION >=96&<336HRS, MINC	329	26.1	23	19.9	-6.2	-24%	-143
E65A	CHORNIC OBSTR AIRWAY DIS, MAJC	1,442	11.5	85	15.8	4.3	38%	368
E62A	RESPIR INFECTN/INFLAMM, MAJC	3,655	14.1	248	15.6	1.5	11%	380
B78A	INTRACRANIAL INJURIES, MAJC	119	30.5	9	73.0	42.5	139%	382
T60A	SEPTICAEMIA, MAJC	94	34.9	8	102.3	67.4	193%	539
B70B	STROKE & OTH CEREB DIS, INTC	894	18.6	82	31.7	13.0	70%	1,070



This patient looks pretty complex





Complexity analysis - ABCDZ

DRG	Description	Price	ABF	ABF %
B70A	STROKE & OTH CEREB DIS, MAJOR COMPLEXITY	€33,360	2,000	20%
B70B	STROKE & OTH CEREB DIS, INTERMEDIATE COMPLEXITY	€11,180	3,000	30%
B70C	STROKE & OTH CEREB DIS, MINOR COMPLEXITY	€6,892	4,500	45%
B70D	STROKE & OTH CEREB DIS, TRANSFERRED < 5 DAYS	€2,920	500	5%

DRG	Description	Price	My hospital	ABF %	DRG Value
B70A	STROKE & OTH CEREB DIS, MAJOR COMPLEXITY	€33,360	50	12%	€1,668,000
B70B	STROKE & OTH CEREB DIS, INTERMEDIATE COMPLEXITY	€11,180	150	36%	€1,677,000
B70C	STROKE & OTH CEREB DIS, MINOR COMPLEXITY	€6,892	200	48%	€1,378,400
B70D	STROKE & OTH CEREB DIS, TRANSFERRED < 5 DAYS	€2,920	20	5%	€58,400
					€4,781,800

DRG	Description	Price	If at average	ABF %	DRG Value
B70A	STROKE & OTH CEREB DIS, MAJOR COMPLEXITY	€33,360	84	20%	€2,802,240
B70B	STROKE & OTH CEREB DIS, INTERMEDIATE COMPLEXITY	€11,180	126	30%	€1,408,680
B70C	STROKE & OTH CEREB DIS, MINOR COMPLEXITY	€6,892	189	45%	€1,302,588
B70D	STROKE & OTH CEREB DIS, TRANSFERRED < 5 DAYS	€2,920	21	5%	€61,320
					€5,574,828

€5,574,828



Discharge by day of the week

				% Disc	harges Da	ay Of Wee	k		
	М	Т	W	Т	F	S	S	Weekday	Weekend
My hospital	16%	17%	18%	17%	23%	6%	4%	91%	9%
Model 3	15%	16%	17%	17%	20%	9%	7%	85%	15%
ABF	14%	16%	17%	17%	20%	10%	7%	84%	16%
		% Discharges Day Of Week							
	М	т	W	T	F	S	S	Weekday	Weekend
Model 2	14%	15%	19%	18%	23%	8%	3%	89%	11%
Model 3	15%	16%	17%	17%	20%	9%	7%	85%	15%
Model 4	14%	16%	17%	17%	21%	9%	6%	85%	15%
Maternity	14%	13%	13%	15%	16%	15%	13%	72%	28%
Paediatric	14%	15%	16%	16%	19%	12%	9%	80%	20%
Specialist	11%	16%	15%	18%	21%	15%	3%	81%	19%
ABF	14%	16%	17%	17%	20%	10%	7%	84%	16%

- · Please remember that some hospitals in Model 3 and 4 have maternity services
- · Table shows that Maternity Hospitals operate on a 7 day bases
- · So hospitals with maternity services should have more weekend discharges than those without





- This year's model using 2023 data
 - Gross expenditure is fixed
 - 2023 HIPE File is closed
- Circulate in similar fashion to 2022 data
 - Gross expenditure
 - · Cases, Admitted Patient Weighted Units, Casemix Index for Overnight, Same Day and Day Case patients
 - ALOS by DRG comparison with peer hospitals
 - ABCDZ comparison with peer hospitals
- · Inputs into the model are not complete
 - Specialty Costing returns not final
 - · Relative values update annually



- 2024 inputs are all live
- Report on all of the inputs by quarter
- If we can report on and share information with the acute hospital system can these inputs be improved before the money is spent and the activity is final
- Institute the ABF Benchmarking Review Group and examine
 - 2023 inputs ahead of the model
 - 2024 inputs in a live year

