



**DRGs: It is not about PCCL - rather it is
about the management of reform**

Experience in the countries of Former Yugoslav Republic

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KEY FACTORS FOR SUCCESSFUL REFORM

STRATEGIC GOAL	CULTURAL CONTEXT	TECHNICAL SKILLS	STRUCTURAL OBSTACLES	RESULTS
0	1	1	1	NO SIGNIFICANT CHANGES
1	0	1	1	SHORT TERM EFFECT
1	1	0	1	FRUSTRATION, LOST OF INTEREST
1	1	1	0	IMPOSSIBLE TO IMPLEMENT; NO SUSTAINABILITY
1	1	1	1	LONG TERM EFFECT; SYSTEMATIC CHANGE

SOURCE: S.M:SHORTELL et al; SCHOOL OF PUBLIC HEALTH BERKELEY (1996)



EX-YUGOSLAVIA



Slovenia and DRG experience: (2004-today)

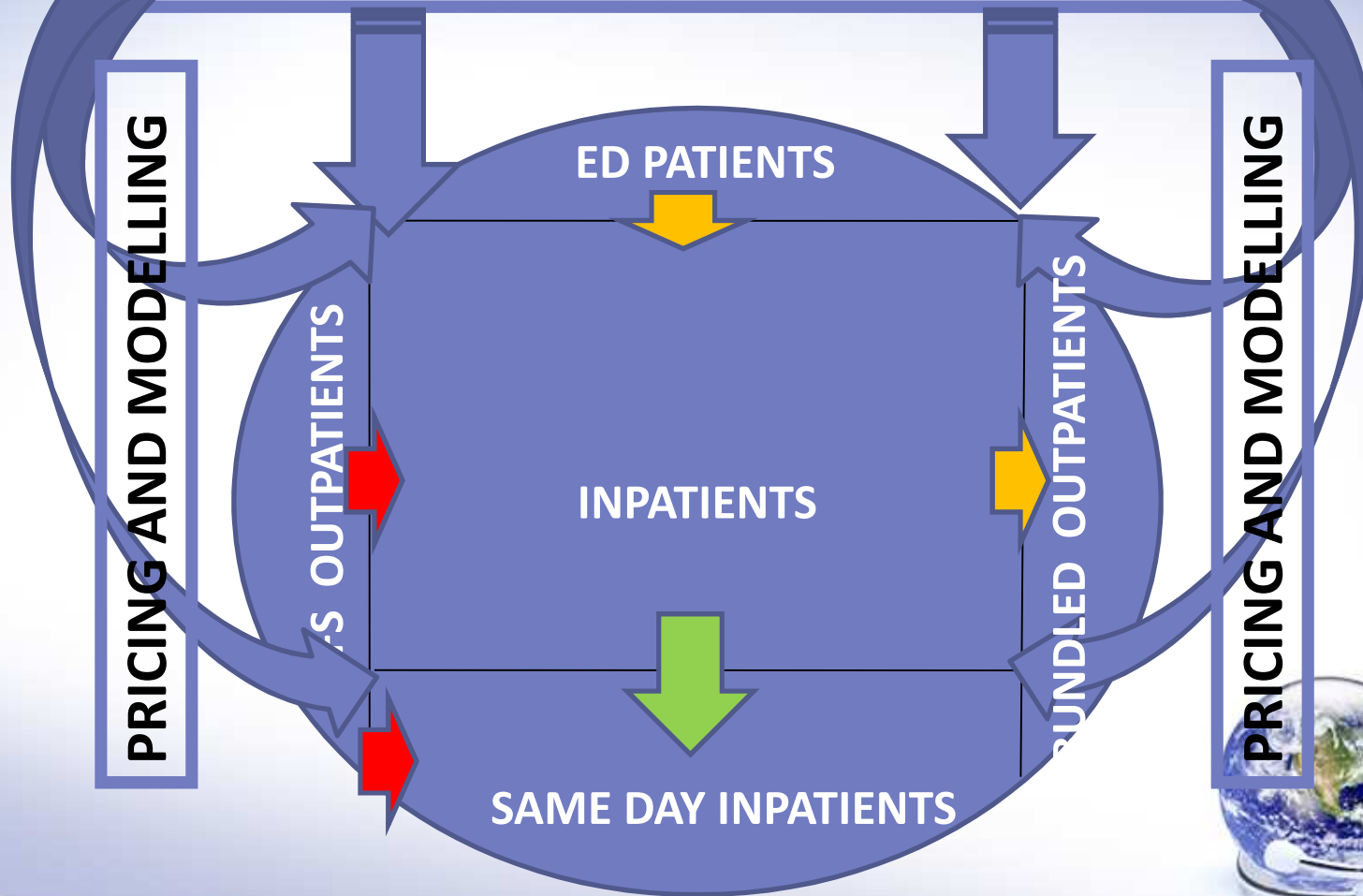
- **Ownership of the project does not exist;**
- **Not enough training, lack of coding skills;**
- **National costing studies were not conducted;**
- **Accuracy of data collected questionable; particularly in the domain of therapeutic procedures;**
- **Participants generally unsatisfied with the implementation model.**

Source: SUMOFIN project 2012

MACEDONIA -DRG 1,2,3 (2008- today)

General Hospitals	Admitted patient payment Feb08*2	JULAU08			PRICE	MODELED CSMX PAYMENT	% REDIST / ADJUST
		UNWTD Cases	JULAU08 WTD Cases	Casemix Index (CMI)			
46 Skopje		2	2	0.96	12,897	24,683	#DIV/0!
48 Bitola		2,647	2,427	0.92	12,897	31,295,068	#DIV/0!
49 Veles	22,892,275	1,676	1,694	1.01	12,897	21,841,740	-4.59%
50 Devdelija	6,736,857	543	523	0.96	12,897	6,738,988	0.03%
51 Gostivar	13,366,371	1,087	864	0.79	12,897	11,139,141	-16.66%
52 Debar	3,783,590	578	464	0.80	12,897	5,980,649	58.07%
53 Kavadarci	9,667,894	1,211	997	0.82	12,897	12,855,941	32.98%
54 Kicevo	5,122,843	1,526	1,076	0.70	12,897	13,872,795	170.80%
55 Kocani	5,661,691	764	637	0.83	12,897	8,214,503	45.09%
56 Kumanovo	22,819,387	1,381	1,253	0.91	12,897	16,158,023	-29.19%
57 Ohrid		1,460	1,327	0.91	12,897	17,115,660	#DIV/0!
58 Prilep	24,219,319	1,726	1,786	1.03	12,897	23,031,139	-4.91%
59 Struga	15,736,009	1,394	1,040	0.75	12,897	13,415,838	-14.74%
60 Strumica	17,485,524	2,000	1,679	0.84	12,897	21,657,054	23.86%
61 Tetovo	39,213,743	2,065	1,791	0.87	12,897	23,095,039	-41.10%
62 Stip	24,990,846	2,460	2,616	1.06	12,897	33,733,007	34.98%
	275,458,763	15,253	17,600	1.15	12,897	226,985,844	-17.60%
	487,155,112	37,773	37,773	1.00	12,897	487,155,112	0.00%

DEFINITIONS AND RULES



Source: Ric Marshall, 2009

CROATIA – THE LAND OF 1000 ISLANDS AND 672 HR DTS (DRGs)



3 CC ,4 CH, 7 C, 23 GH,27
SH , 2 HR.

15 978 acute beds
4 290 612 population
More than 50 % of the
total health care costs
(2007)

CASE MIX IMPLEMENTATION STARTED IN 2006
AR DRG version 5.2



DEMO GROUPER

http://www.cezih.hr/cezih_datoteke/dts/index.html

The screenshot shows a web browser window with the title "DTS - Microsoft Internet Explorer". The address bar contains the URL "http://www.cezih.hr/cezih_datoteke/dts/index.html". The main content area has a red header with the text "Dobrodošli na webi stranici Hrvatske DTS grupe". Below the header, there are several input fields and buttons. The "Ispit:" field is set to "multi", "Godi:" is "2006", "godina:" is "2006", "dana:" is "1", "Tehnički prijem:" is "2006", "Liječenje stacionarnim vrbom:" is "Da", "Trajanje liječenja:" is "5", "dana:", "Tip izvješća:" is "Opisno-komparativni u slučaju bolesti". There is a table with 10 columns and 3 rows. The first row is empty, the second row has "Diagnostika" in the first column, and the third row has "Postupci:" in the first column. There are "Grupiraj" and "Izračunaj" buttons to the right of the table. Below the table, there is a red header with "Najnovije" and a "Učitaj" button. Below that, there is a "Traženi podaci:" field and "Izračunaj" and "Traženo" buttons.

ERROR DRGs
960Z, 961Z &
963Z= 0
901 Z & 902Z <
0,08%

Average
number of SDX
per case 2

Average number
of procedures
per case 19 (3-
51)



RESULTS

	2008	2009	2010	2011	2012	2013
Number of separations	PILOTING	630 892	558 823	531 884	611 351	559 559
Base Price (EU) Surgical/ Medical	PILOTING	1400	1218	1218	1100/900	700/600
Case mix	PILOTING	1.18	1.21	1.12	1.13	1.14
% of DRG groups with A prefix	PILOTING	28.3	23.1	22.6	24.3	23.1

Source CHIF 2014

B67 in Croatia – theory, evidence and challenges

DRG Group (2011)	Separations	Total amount (Kn)	Drug expend. (Kn)	Suppl. (Kn)	ALOS	Average number of secondary diagnoses	Average number of procedures
B67A	545	28 247 468	422 216	236 517	14.03	2.68	34.53
B67B	542	8 204 693	394 218	461 897	10.39	0.49	41.29
B67C	639	5 136 130	693 358	393 445	7.13	1.19	33.76

PCCL > 3

PCCL > 2 and patients older than 60 years

Patients younger than 60 years

Source (www.cezih.hr DTS data 2012)



BOSNIA AND HERZEGOVINA – THE LAND OF BLOOD AND HONEY



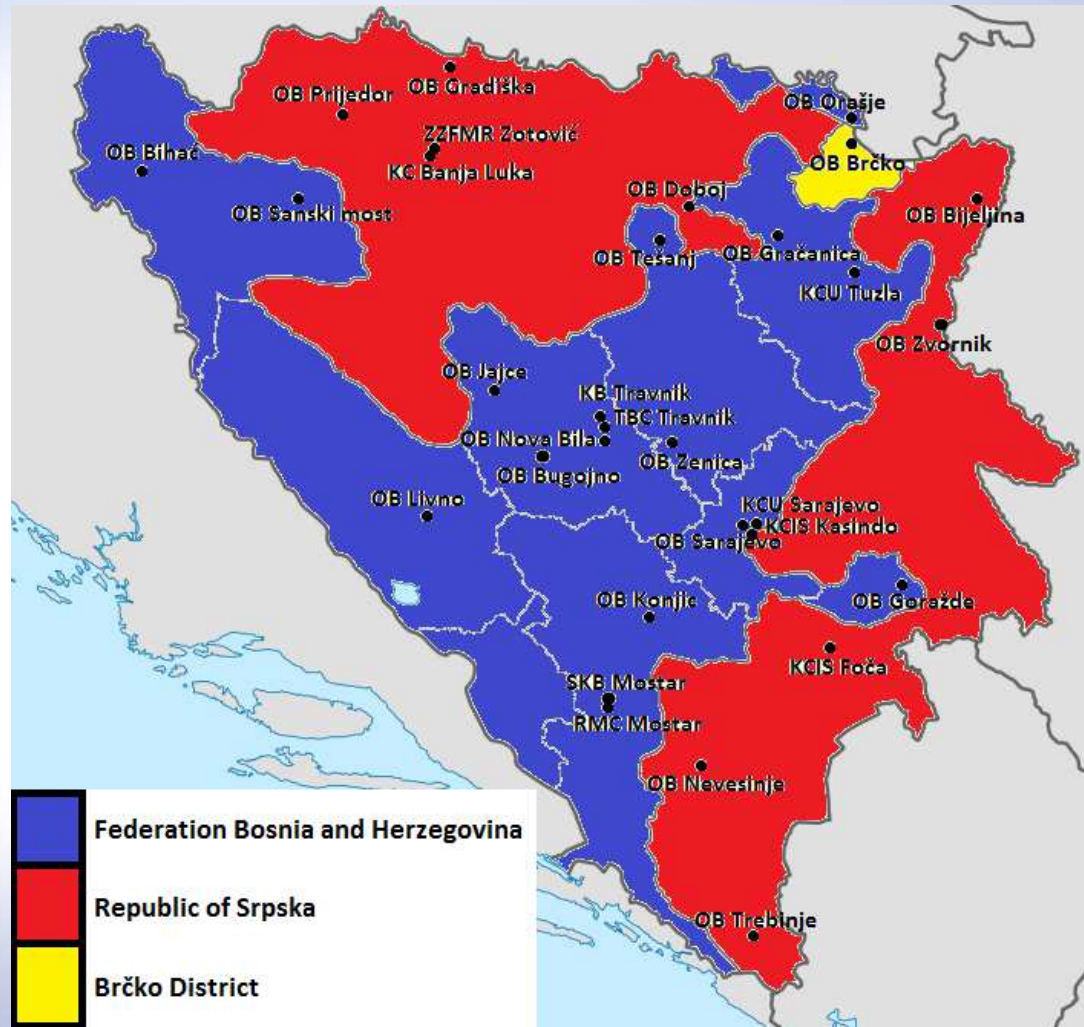
3 ENTITIES :

- RS
- FBiH (10 CANTONS)
- BRČKO DISTRICT

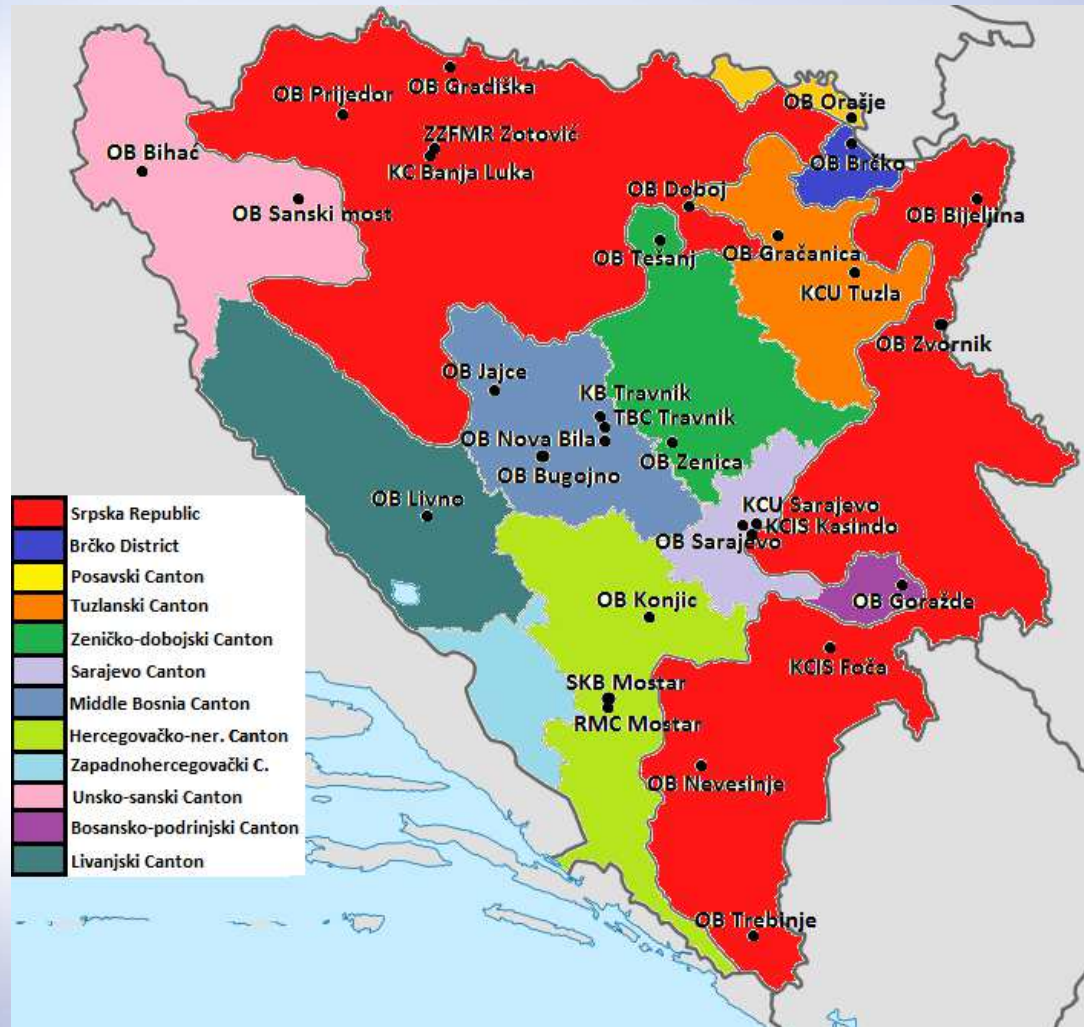
- WB PILOT PROJECT 2004-2007
- IPA PROJECT 2011-2013 - NATIONAL ROLL OUT AR DRG 5.2



BOSNIA AND HERZEGOVINA - ENTITIES



BOSNIA AND HERZEGOVINA - INSIDE THE FEDERATION



LESSONS LEARNT – TRAINING

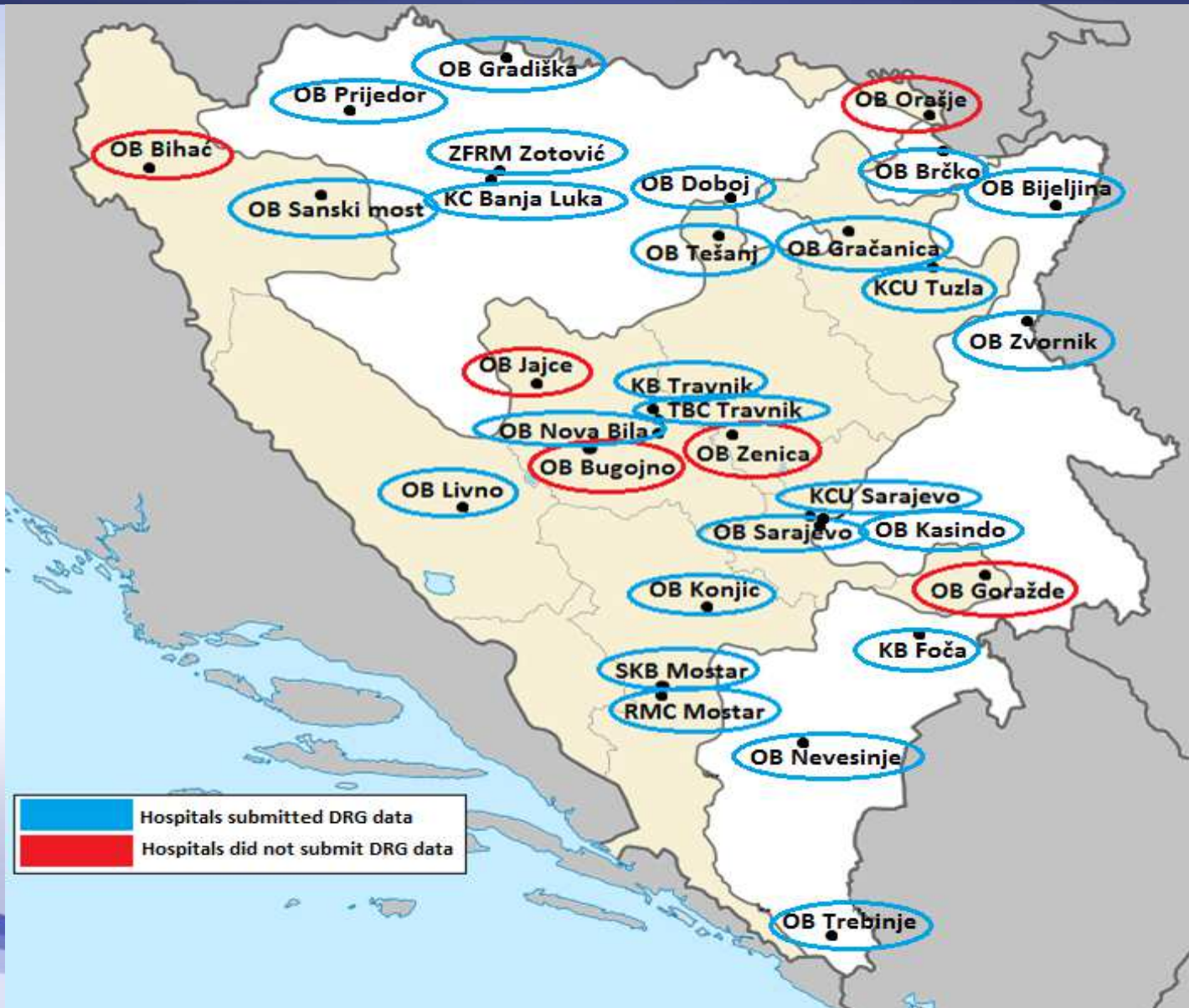
	Project Month						
	3 - 5	6 - 9	10 - 12	13 - 15	16 - 18	19 - 21	22 - 23
Training		Coding hospitals and trainers			Contracts & finance		
DRG Data			31 hospitals				
Grouper			Development and fine tuning				
Costing				CW; analysis; pricing		Budgets	
Purchasing					New contracts		
IT system			Analysis and recommendations				
Action plan							Final rep.



LESSONS LEARNT – hospital managers involvement

Day 1 :			Day 3		
11.00-12.30	Meeting 1 - Meeting with hospital management <ul style="list-style-type: none"> Overview of the project Role of the hospital in project implementation 	Karl Karol and Karolina Kalanj	11.00 - 11.45	Session 1 - Contracting and purchasing using DRGs	Karl Karol
12.30-14.00	Meeting 2 - Meeting with DRG coordinator <ul style="list-style-type: none"> Discharge data recording in departments - hospital structure, number of departments, statistical discharge practice Discharge data recording in hospital - patient transfer to other facilities Reporting obligations to HIFs and other agencies at cantonal, entity and state levels (DTS results and perceived issues in RS) Hospital patient records and IT departments – discuss DRG data format and transmittal Hospital work flow – admission, treatment, transfer, discharge Accounting and financial departments - invoicing practice, copayment policy Quality department – use of care pathways 	Karl Karol and Karolina Kalanj	11.45 - 13.15	Session 2 - Coding symptoms, factors influencing health status and infectious diseases; coding neoplasms; coding blood, endocrine and mental disorders; coding nervous system, eye and ear diseases	
14.00-15.30	Hospital ward visit – ward procedures	Karl Karol and Karolina Kalanj	13.15 – 13.30	Coffee Break	
Day 2			13.30 – 15.00	Session 2 (continued) - Coding symptoms, factors influencing health status and infectious diseases; coding neoplasms; coding blood, endocrine and mental disorders; coding nervous system, eye and ear diseases	Karolina Kalanj
11.00 - 11.45	Session 1 - DRG and health financing – the objectives of DRGs	Karl Karol	15.00 – 15.30	Session 3 - Coding assignment as homework	Karolina Kalanj
11.45 - 13.15	Session 2 - The application of ICD 10 AM, ACHI, ACS, medical records, and grouper data sets	Karolina Kalanj	Day 4		
13.15 - 13.30	Coffee Break		11.00 - 11.45	Session 1 - Recap of the previous day and DRG assignment	Karolina Kalanj
13.30 – 15.00	Session 3 - Coding circulatory diseases; coding respiratory, digestive and skin diseases; coding musculoskeletal and genitourinary diseases	Karolina Kalanj	11.45 – 12.30	Session 2 – Admission rules	Karolina Kalanj
			12.30 – 13.15	Session 3 - Coding pregnancy, childbirth and the puerperium; coding perinatal and congenital conditions; coding injuries and causes of injury; coding poisonings, causes of poisonings; and disease indexing	Karolina Kalanj
			13.15 – 13.30	Coffee Break	
			13.30 – 14.30	Session 3 (continued) - Coding pregnancy, childbirth and the puerperium; coding perinatal and congenital conditions; coding injuries and causes of injury; coding poisonings, causes of poisonings; and disease indexing	Karolina Kalanj
			14.30 – 15.00	Session 4 - Function of DRG Help Desk and closing discussion	Karolina Kalanj

DRG building blocks: **DATA**



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SLOVENIA MONTENEGRO

CROATIA

CROATIA
MACEDONIA

BIH



REFERENDUM
ZA ZAKON

● UTSOURCING

protiv
izdvajanja
pomoćnih poslova
u javnom i državnom
sektoru




THE ACTION PLAN FOR THE FUTURE

- To ensure that all AR-DRG documentation is completely and accurately translated
- To define what is included and what is not included in the acute care payment model
- To undertake costing studies to make the adopted cost weights relevant to local conditions
- To provide a financially realistic transition period for moving to ABP
- Capacity building and skills development programs in DRGs and activity based funding





CROATIA

BOSNIA AND HERZEGOVINA

SERBIA

HERZEGOVINA-NERETVA CANTON
(Hercegovačko-neretvanska županija)

Mostar

MONTENEGRO

AR DRG OVERSEAS – ADAPTATION TO LOCAL CONTEXT

Health Insurance Fund Herzegovina-Neretva Canton is responsible for paying for health care of 200 000 insurees.

Cantonal health care providers:

- 11 Health Centres
- 3 Hospitals - 75 to 786

Annual HIF Budget is \$75 million of which 65% is allocated to financing of hospitals.



STARTING THE PROJECT IMPLEMENTATION

- EU funded project to implement ABF
- HIF established counterpart team comprising experts in medicine, IT and finance.
- EU project provided technical assistance which included: coding training; auditing; contracting and IT support.



PROGRESS AND NEED

- All hospitals in Canton are coding all acute episodes and send monthly activity reports to the HIF
- Coding is undertaken in the main by doctors – no difficulties were experienced in motivating doctors to be involved in coding
- HIF doing best they can to audit and control coding quality.
- Main need is to improve links with financial management and payment based on performance
- Costing studies would be useful in the future



Acc. Nr.	Insurance nr.	DRG	Cost-weight	Admission day	Discharge day	Main diagnosis	Additional diag. 1	Additional diag. 2	Additional diag. 3	Procedure 1	Procedure 2	Procedure 3	Procedure 4	Procedure 5	Procedure 6	Procedure 7	Procedure 8
1200/13	271193415	F11B	4.81	25-09-2013	13-12-2013	I70.24	D64.9	E10.52		44367-02	30023-01	92514-39	92514-39	13706-02	95550-03		
1390/13	240897915	961Z	0.00	06-11-2013	13-12-2013	T94.0	F07.2	G57.3	M24.5	58500-00	57512-00	57518-01	96118-00	96121-00	96126-00	96130-00	96138-00
1396/13	030293415	F66A	0.88	07-11-2013	01-12-2013	I25.5	J18.9	I70.9	F01.9								
1448/13	220394715	H64B	0.54	20-11-2013	05-12-2013	K80.10											
1449/13	100297715	H64B	0.54	21-11-2013	02-12-2013	K80.10				39445-00	92514-19						
1451/13	100792315	F62A	2.50	22-11-2013	04-12-2013	I50.1	I63.5	R09.2	R40.2	56001-00							
1453/13	080896415	K60B	0.96	22-11-2013	10-12-2013	E10.8	L06.9										
1456/13	070994915	F72A	1.24	24-11-2013	04-12-2013	I20.0	I42.0	I69.3	J32.9								
1457/13	230293315	F66A	0.88	23-11-2013	06-12-2013	I25.5	I50.1	R09.2	F01.9	92052-00							
1461/13	010597315	901Z	4.24	26-11-2013	04-12-2013	D25.9	N92.0	D50.0		35667-00	92514-29	92518-01	13706-01				
1462/13	220897515	960Z	0.00	25-11-2013	04-12-2013	K80.1	30445-	92514-		30445-00	92514-29						
1464/13	110298015	Z64A	1.21	26-11-2013	04-12-2013	Z76.4											
1465/13	180201115	E69C	0.47	26-11-2013	02-12-2013	J45.0											
1466/13	200798115	Z64A	1.21	26-11-2013	02-12-2013	Z76.4											
1467/13	130392915	F62B	1.16	26-11-2013	06-12-2013	I50.1	J44.1	Z72.0	D63.8								
1469/13	040296515	960Z	0.00	27-11-2013	06-12-2013	K25				30375-10	92514-29						
1470/13	160601015	G68B	0.47	27-11-2013	02-12-2013	K52.9											
1471/13	261298615	Z64A	1.21	27-11-2013	02-12-2013	Z76.4											
1472/13	300897415	G07B	1.42	27-11-2013	05-12-2013	K35.9				30571-00	92514-29						
1473/13	100292715	B69B	0.69	27-11-2013	05-12-2013	G45.9	I10	N11.9		56001-00							
1474/13	260993915	H07B	2.72	28-11-2013	30-12-2013	K80.10	E10.8	I42.9	Z85.4	30446-00	92514-39						
1475/13	231093615	F66A	0.88	28-11-2013	27-12-2013	I25.5	R09.2	I48	I65.2								
1477/13	150399215	B71B	0.35	28-11-2013	03-12-2013	G51.0	J32.9			56001-00							
1478/13	280192215	B69A	1.50	29-11-2013	06-12-2013	G45.9	I69.3	G81.0	I42.9	56001-00							
1479/13	240101015	L63C	0.62	29-11-2013	06-12-2013	N39.0				58721-00							
1480/13	180197315	Z64A	1.21	29-11-2013	06-12-2013	Z76.4											
1481/13	010994415	F65B	0.70	29-11-2013	10-12-2013	I70.24	E11.52										
1483/13	150892815	E65B	1.01	30-11-2013	06-12-2013	J44.1	I25.5	I71.4		92052-00							
1484/13	271296415	B70B	2.19	30-11-2013	11-12-2013	I63.5	G81.0	D63.8	D25.0	56001-00							
1486/13	091193715	I78B	0.56	30-11-2013	02-12-2013	S72.00											
1487/13	250993015	E75A	1.44	02-12-2013	13-12-2013	R09.2	I25.5	I10	I20.9	56307-00							
1488/13	210394115	I13B	2.78	02-12-2013	20-12-2013	D48.0				48406-01	92514-29	95550-03					
1489/13	040294015	M01Z	3.43	02-12-2013	14-12-2013	N40				37200-03	92514-29						

LESSONS LEARNT

- Health staff generally understand the idea of ABF and support the concept
- DRG development projects must develop infrastructure and skills for sustainability
- Ongoing DRG development must be funded
- The DRG system must be owned by someone
- Political will is required to make hard decisions on hospital rationalisation when hospitals are paid for performance

