Health Coverage in Lebanon

Rotary Club- Bristol

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Health Coverage in Lebanon

6 Public Funds
- Social Security Fund 28%
- Civil Servants Cooperative 5%
- 4 Military Schemes 9%

Private Insurance (& Mutual Funds) 12%

Almost half of the population has no formal insurance, and is entitled to the coverage of the Ministry of Public Health (MOPH).

MOPH
Coverage of Last Resort

- Hospital care and expensive treatments i.e what may constitute a catastrophic spending for households *(ensuring accessibility while protecting households from impoverishment).*

- The MOPH does not reimburse ambulatory care. It provides however an alternative for the poor by *subsidizing a comprehensive package of PHC services* through a wide network of PHC centers.

Out- Of - Pocket

Imposed fees and co-payment may hinder the accessibility of the poor to health services.

Health spendings may become catastrophic for the near poor and push them under the poverty line.

OOP representing 60% of THE in the 90's, spent mostly on private ambulatory services. Decreased to less than 40%, by improving accessibility to PHC.

The MOPH Strategy to Reduce OOP Spending

- Autonomous more effective public hospitals
- Strengthen and improve the Image of PHC
- Contain the cost of pharmaceuticals (50% of OOP)
- Empower the patient and protect him/her from undue spending

PHC as an alternative to private ambulatory care

- **MOPH-NGOs Relationship formalized by contractual agreements.**
  - In kind contribution of the MOPH: providing vaccines, drugs, materials for health education, developing guidelines and training…
  - PHC centers commitment to provide a comprehension package of PHC and to improve the community health status.
  - Accreditation
- **Tripartite contracting**
  - Legal framework based on common understanding. (explicit commitment to a comprehensive package of services and quality of care, performance based financing)

Routine PHC Services

Health education

General medicine

Pediatrics

Reproductive health

Essential medicine

Non-Communicable diseases

Oral health

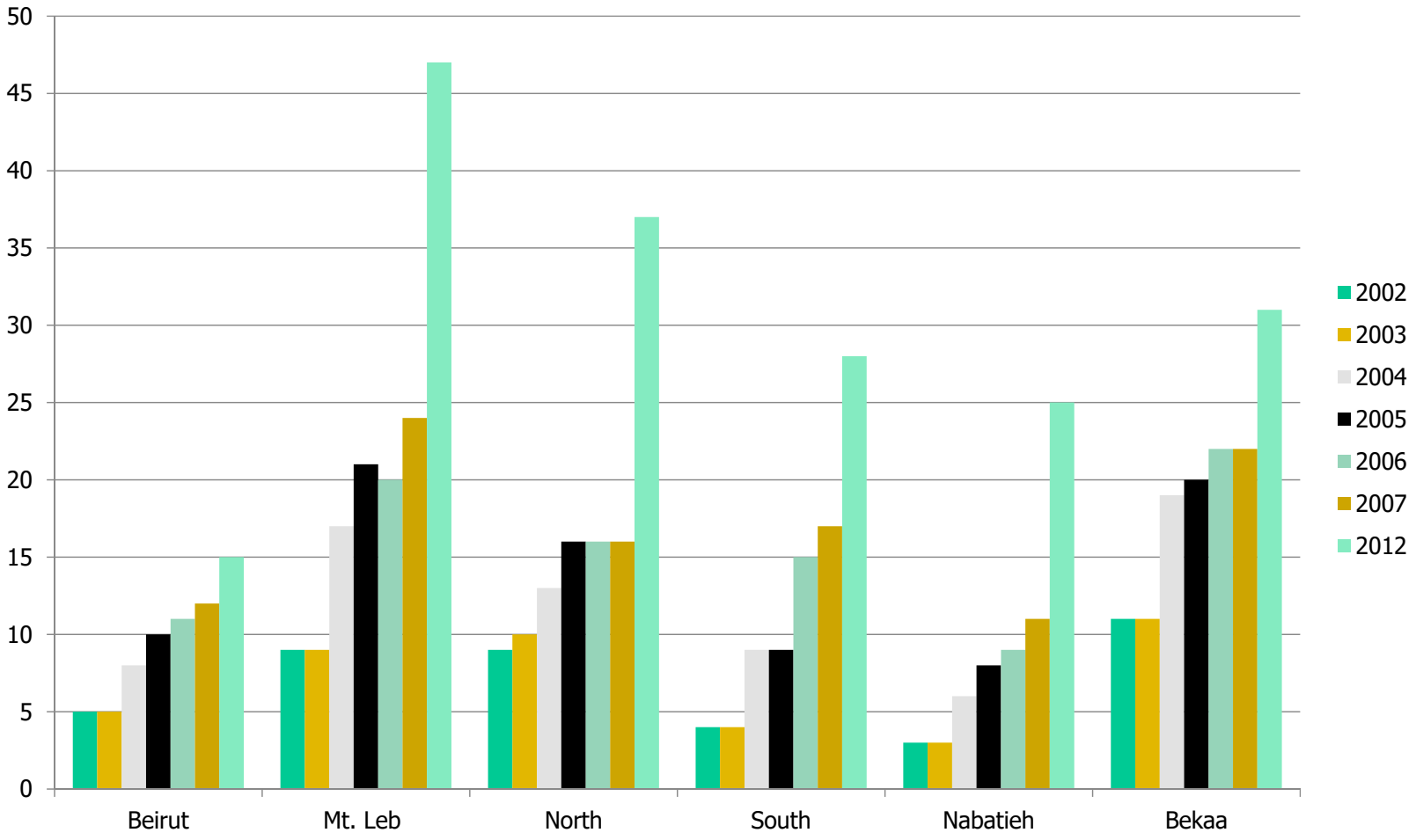
Mental health

The National Network of PHC Centers

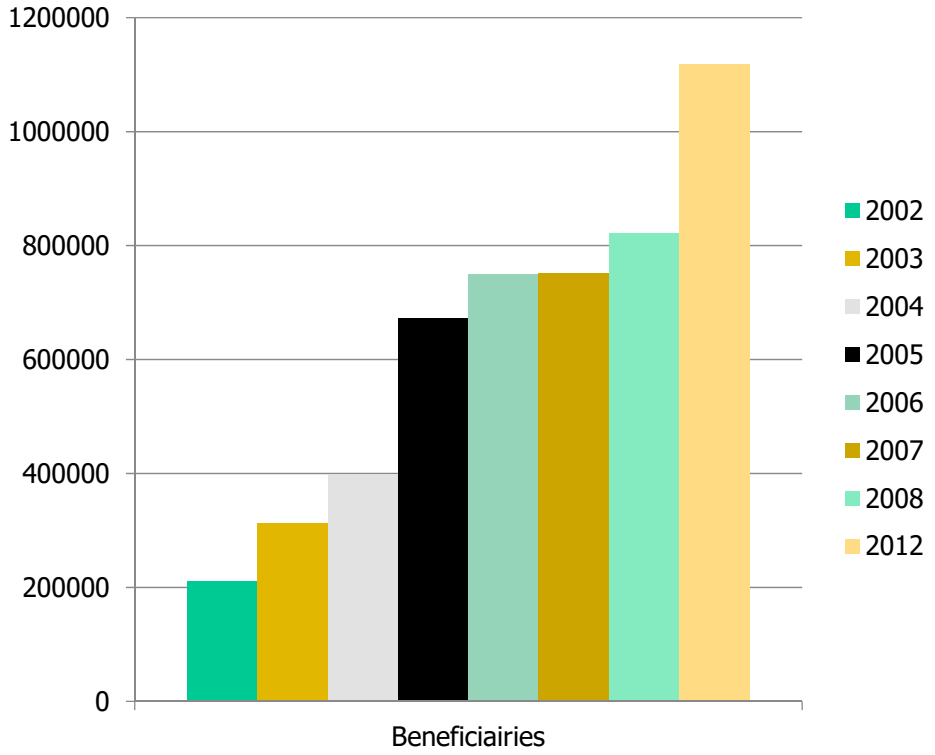
- 182 public and NGOs' health centers affiliated by the MOH program in addition to one PHC with Academia (the Lebanese University).

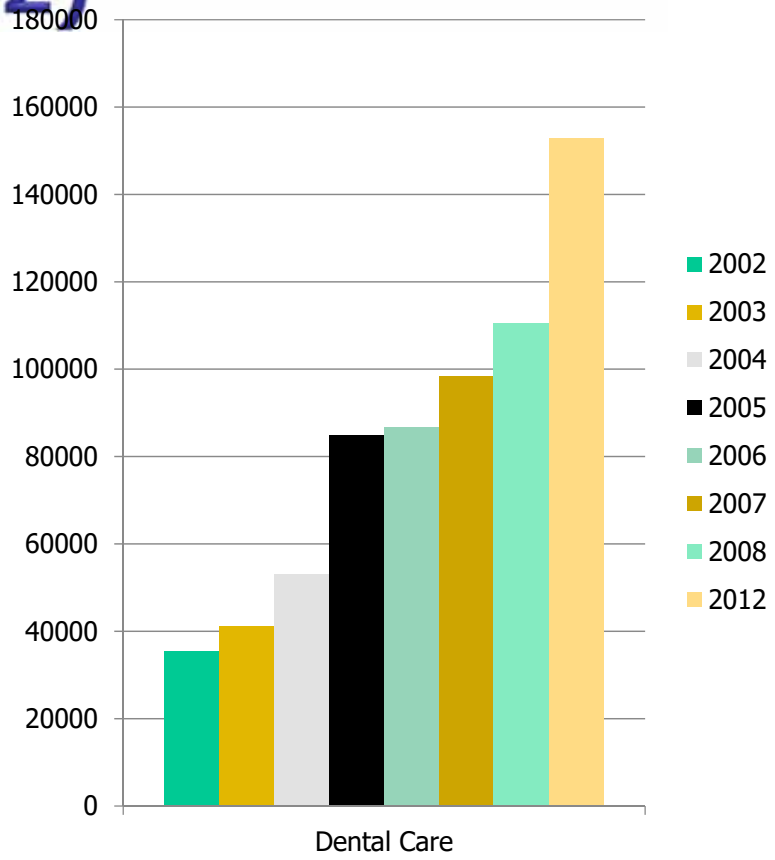
	MOPH Self managed	MOPH Managed by NGOs	MOPH Managed by municipalities	Municipalities	MOSA	NGOs	Total
Beirut	2	0	0	0	0	13	15
Mt. Leb	2	5	3	9	3	24	46
North	5	3	0	9	1	19	37
South	2	0	1	6	1	18	28
Nabatieh	3	2	2	4	2	12	25
Bekaa	2	0	5	1	1	22	31
Total	16	10	11	29	8	108	182

PHC centers

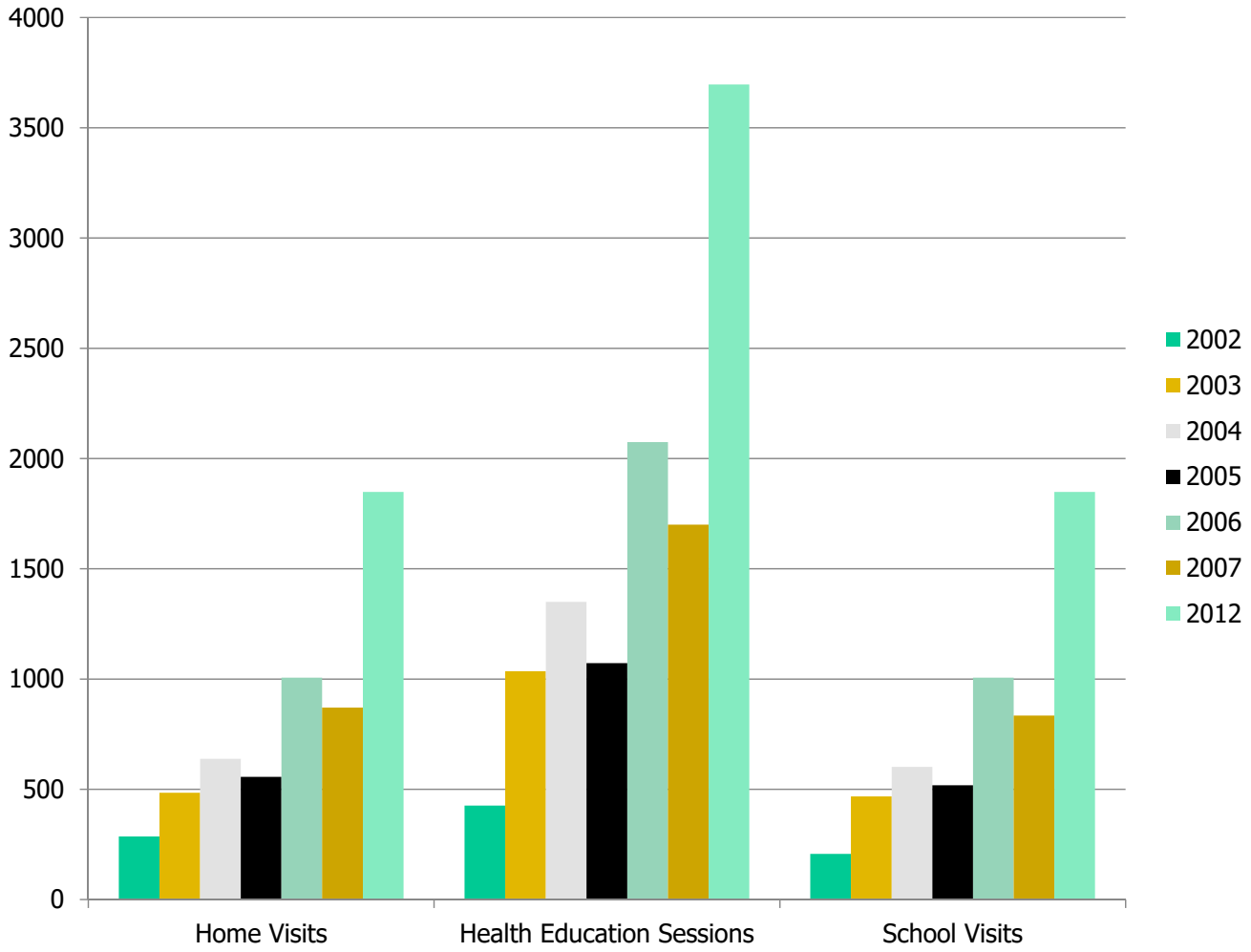

50
45
40
35
30
25
20
15
10
5
0
Beirut
Mt. Leb
North
South
Nabatieh
Bekaa
2002
2003
2004
2005
2006
2007
2012

Number of beneficiaries of PHC services (National Network 2001-2008 & 2012)





Primary Health Care Community Services



Universal PHC Project

- The aim is to cover PHC & out patient hospital care as a first step towards Universal Health Coverage. Starting by the poorest Lebanese defined by MOSA as a pilot.
- PHC centers will be paid on a capitation basis depending on the number of enrollees in the program.

Target population

- The MOSA targeting project has defined 235,313 Lebanese poor.

- The MOPH has mapped 150,696 of those living in areas mostly affected by the Syrian Crisis and distributed around 50 PHC contracted centers.

The Basic Benefit Package

- Four different packages:
  - ✓ Wellness package for 0-18 years old
  - ✓ Wellness package for Males and Females 19+
  - ✓ NCD package-Diabetes / Hypertension
  - ✓ Reproductive Health Package (Mother & Child)

The Basic Benefit Package

- The Package includes (depending on the age/gender/disease group):
  - ✓ Vaccination
  - ✓ Laboratory tests
  - ✓ Consultations and Counseling
  - ✓ Medications
  - ✓ Radiology (Mammography/US/BDM)
  - ✓ EKG
  - ✓ Pap smear
  - ✓ Case Management

NCDs

- Case Management
- Referral system and continuum of care
- Electronic medical file

التدرن الرئوي

- ازدياد عدد الحالات بين الأجانب
- ارتفاع عدد الإصابات بين الأطفال
- قرار وزيري الصحة والعمل بالزامية الصورة الشعاعية إضافة إلى الإختبار الجلدي لكل عامل اجنبي موجود في لبنان عند طلب الإقامة وتجديدها
- بين أيلول 2014 وأيلول 2015 تم معاينة وتصوير 17269 طالب إجازة عمل وتم تشخيص 114 حالة سل نشيط
- جميع هذه الحالات هي قيد المعالجة والمتابعة

TB Cases 2014

All cases	Lebanese	Non Lebanese	Syrian	Ethiopian	Palestinian	others
682	337	345	109	130	16	90

Gender	male	female
Patients number	277	405

Governorate	Beirut	Mount Lebanon	Bekaa	North	South
Patients number	89	258	99	143	93

Range age	0-4	5-14	15-24	25-34	35-44	45-54	55-64	≥65
Patient numbers	25	31	158	212	105	52	50	49

السلامة العامة

A(H1N1)

Ebola

Mers Corona

Polio

Cholera

Leishmania

WHO Weekly Security update (week 28)

GOARN Partner Institution	Experts deployed
Centers for Disease Control and Prevention (CDC)	13
EM Lab Team	4
European Centre for Disease Prevention and Control (ECDC)	7
Instituto de Salud Carlos III (ISCIII)	3
Ministry of Health, Lebanon	1
Public Health Agency of Canada (PHAC)	12
Total (Guinea)	**40**

GOARN Operational Support Team (OST)

Global Outbreak Alert & Response Network

تدابير ترشيد الإنفاق

- تطوير شبكة الرعاية الصحية الأولية وتعزيز البرامج الوقائية
- تطوير قاعدة المعلومات الموحدة للمستفيدين من الجهات الضامنة
- قرارات متتالية لتخفيض اسعار الأدوية
- اعادة توزيع المستشفيات وفقاً لفئات تعرفة تأخذ بالإعتبار جودة الخدمات (accreditation) ورضى المريض (Patient Satisfaction) وجديّة الحالات (Case-mix)
- الإستعانة بمؤسسات خاصة TPA للمراقبة والتدقيق وتطبيق نظام معايير الدخول إلى المستشفى Admission criteria

Containing the Pharmaceutical Bill

- Decision # 301/1 (2005): price comparison with KSA (1102 drugs) and Jordan (872 drugs) : ***average yearly reduction 24 million USD***

- Decision # 306/1 amended by Decision # 51/1 (2006):
  average reduction 27 million USD

خفض الفاتورة الدوائية عبر اعتماد آليات جديدة للتسعير.

- بموجب المذكرة رقم 8 تاريخ 2014/2/28 تطبيق القرار 728/1 تاريخ 2013/5/11 (تخفيض تلقائي للدواء الجنيسي) أدى الى تخفيض فوري **629 دواء بمعدل 21 %**
- تطبيق القرار الثاني: 796/1 تاريخ 2014/4/17 (Lowest price in Europe + creation of a new category E) أدى إلى تخفيض فوري لـ **261 دواء بمعدل 17 %**

خفض الفاتورة نتيجة عمليات اعادة التسعير الدورية

- عملية إعادة التسعير لـ 469 دواء خلال عام 2013 أدت إلى تخفيض **167 دواء بنسبة 17.4%**
- عملية إعادة التسعير لـ 572 دواء خلال عام 2014 أدت إلى تخفيض **253 دواء بنسبة 16.2%**

- *إن مفاعيل هذه القرارات ما زالت مستمرة لتشمل تدريجياً اعداداً اكبر من الأدوية وفقاً للآليات المتبعة للتسعير وإعادة التسعير.*

قرار رقم 1980/1 تاريخ 26/11/2014 يتعلق بإعادة توزيع المستشفيات وفقاً لفئات التعرفة

معايير التصنيف	عامل التثقيل
نتائج الإعتماد Accreditation	%40
مقياس رضى المريض Patient Satisfaction	%10
مزيج الحالات المرضية الدالة Case mix	%35
نسبة استشفاء مرضى العناية المركزة مقارنة مع المعدل العام	%5
نسبة الإستشفاء الجراحي مقارنة مع المعدل العام	%5
نسبة الحسم بعد تدقيق الفواتير الاستشفائية في وزارة الصحة	%5

Licensure VS Accreditation

ACCREDITATION

A program of periodic assessment of a health care organization compliance with published standards, resulting in a public recognition of the achievement of Accreditation:

- Voluntary (or Mandatory).
- External independent auditors.
- Periodic audit
- Continuous improvement process of achievements of optimal quality standards.

Implementation of the Accreditation Program

A Step-wise Approach

Step One: Developing and Testing Standards and Procedures (2001) & Guideline manuals

Step Two: First National Survey (2002)

Step Three: Follow-up Audit (Second Survey) (2003)

Step Four: Standards Upgrading (2004) and Third National Survey (2005)

Step Five: Follow-up survey (2006)

Developing Standards (1st edition-2001)

Two tiered approach

- ***Basic standards:*** the minimum standards required for a hospital to operate in a safe environment for the staff, the patient and the community. (the lacking standards for licensing!)
- ***Accreditation standards:*** higher order standards that are based on Quality Assurance and Quality Improvement.
- ***Vertical Audit***: Standards are grouped by Department: Emergency, Pediatrics, Intensive Care, Nursing, Pharmacy….

A New Procedure

- Survey Audits

Hospitals survey consists of two auditing mechanisms: internal & external

1st the self assessment conducted by the hospital

2nd the external audit performed by an authorized body AB (organisme agrée OA)

- Audit Reports

Accreditation award is based on the technical examination of two documents (self assessment and external audit) by a consultative committee of independent neutral experts: The Technical Committee (TC).

A New Procedure

- Additional Standards

Two new chapters are added to the standards issues by Decree # 14263 of 4 march 2005

- Patient safety and risk management standards
- Evaluation of professional practices standards

Horizontal Audit crosscutting over Departments

- Built-In Administrative Recourse

The HCO is allowed to comment on the AB report, to protest and provide evidence.

The HCO can also dispute the TC decisions.

Primary Health Care Accreditation

PHASE I (2008) Accreditation Canada

- Development of national PHC accreditation standards
- Education and Training of key stakeholders on accreditation process
- Pilot Testing of standards.

PHASE II (2011-2012)

- Capacity building of the first of 25 primary care centers to meet the standards.

PHASE III

- Continue the survey process
- Build national capacity to sustain the Program activities
- Accreditation Canada will train 20 Lebanese surveyors to become certified primary health care surveyors in Lebanon

Health Providers

	Year	UNIT	Physicians	Dentists	Nurses + Midwives	Pharmacists
Lebanon	2013	per 1000	3.1	1.3	3.3	1.7
Jordan	2010	per 1000	2.5	0.9	4	1.4
Egypt	2009	per 1000	2.8	0.4	3.5	1.7
Bahrain	2012	per 1000	0.9	0.2	2.4	0.1
Tunisia	2009	per 1000	1.2	0.2	3.3	0.2
France	2013	per 1000	3.2	0.6	0.3	1.1
UK	2013	per 1000	2.8	0.5	8.8	0.8
US	2010	per 1000	2.4			0.9
Greece	2001	per 1000	4.4	1.1	0.2	

Health System Performance Assessment 2003 (Cont'd)

Hospitalization rates, Ambulatory visits and OOP health spending by income category and sex

	Hospital Care % per year		Ambulatory Care (% per month)		Spending on health LP Per household/year
	Once	**>Once**	**Received Care x 1**	**Received Care > 1**	
< 300 both sexes (Males, Females)	10.5 (M 9.9, F 10.9)	3.1 (M 3.4, F 2.8)	27.9 (M 24.5, F 30.6)	6.3 (M 3.5, F 8.5)	1396
801-1200 both sexes (Males, Females)	9.1 (M 8.6, F 9.6)	1.5 (M 1.6, F 1.3)	24.6 (M 22.6, F 27.2)	3.7 (M 3.2, F 4.1)	2973
> 5000 both sexes (Males, Females)	7.8 (M4.4, F 10.8)	2.2 (M 2.5, F 1.9)	19.8 (M 13.8, F 25)	3.7 (M 3.4, F 3)	4221
Lebanon both sexes (Males, Females)	**8.7 (M 7.7, F 9.6)**	**1.5 (M 1.5, F 1.5)**	**24.6 (M 22.1, F 27)**	**3.5 (M 2.7, F 4.2)**	**2609**

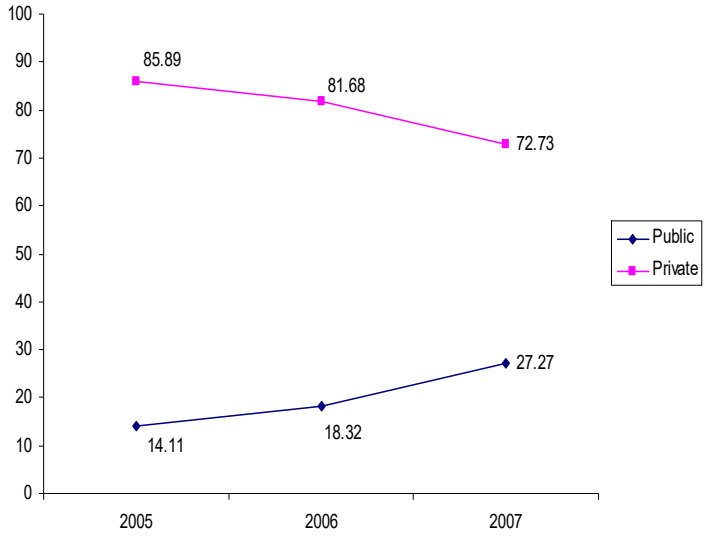
MOPH Coverage for hospital care

Per capita allocation of MOPH hospitalization budget by mohafazat (LBP)

	Population*	MOPH Budget Allocation/year	
		2007**	Per capita allocation
Beirut and Mount Lebanon	1,892,073	90,133,200,000	48,000
North Lebanon	768,709	45,547,200,000	59,000
South and Nabatieh	623,043	41,826,000,000	67,000
Bekaa	471,209	33,151,200,000	70,000
Lebanon (total)	**3,755,034**	**210,657,600,000**	**56,000**

** Households Survey 2004. CAS* *** Decree No. 22/1 January 2007, MOPH*

MOPH-subsidized admissions to public and private hospitals



Health System Performance Assessment

Quality misconceptions

Hospital Services

Accreditation survey revealed serious quality problems in hospitals (mostly private) that showed however good compliance and promising seriousness.

Consumer Satisfaction

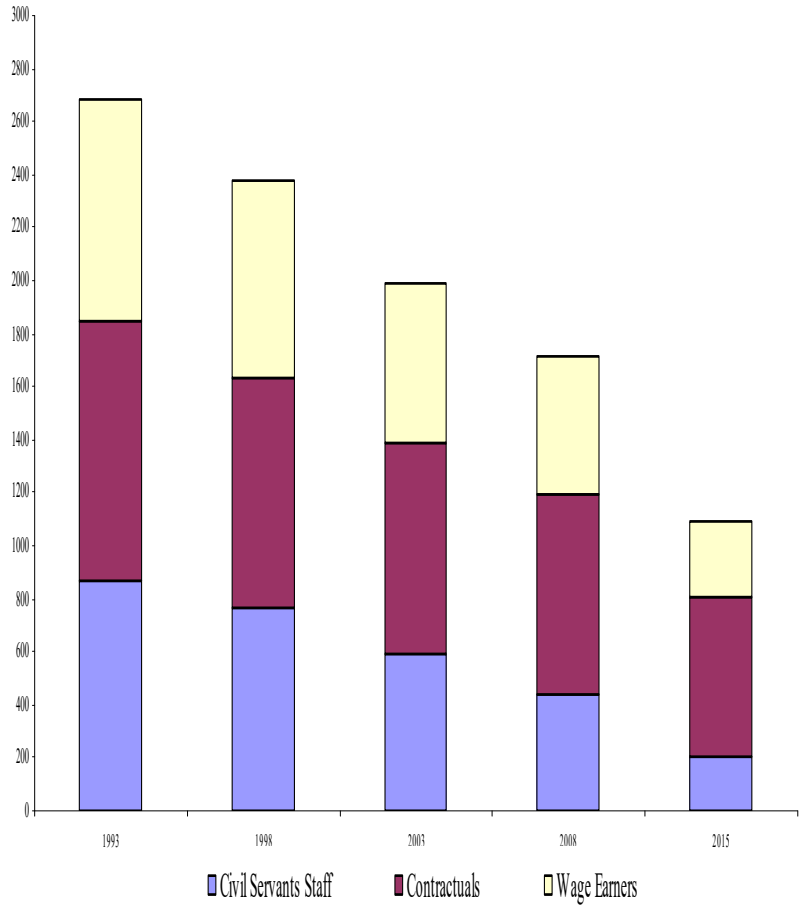
	Public	Private	NGO	Total
Has no difficulty	92.0	92.2	91.3	92.1
Waited a long time before being admitted	6.3	6.3	8.7	6.4
I had to go to many hospitals to find a bed	0.3	0.9		0.8
Missing	1.4	0.6		0.6
n	**343**	**3394**	**222**	**3959**

NHHEUS 1998-1999, Consumer Satisfaction: Difficulty in being admitted for hospitalization (%).

Health System Challenges

- Multiplicity of Actors: fragmentation / diversity
- Limited resources of the MOPH (alarming decrease of number of staff)
- Health sector human resources imbalances (shortage of nurses)
- Massive influxes of Syrian refugees
- Political instability

MOPH Staff



	1993	1998	2003	2008	2015
Civil Servants Staff	**868**	767	591	443	200
Contractuals	**983**	869	795	753	607
Wage Earners	**834**	737	606	523	282
Total	**2683**	**2373**	**1992**	**1719**	**1089**

MOPH Staff: 1089

AUB MC Staff: 2700

MDGs related health indicators

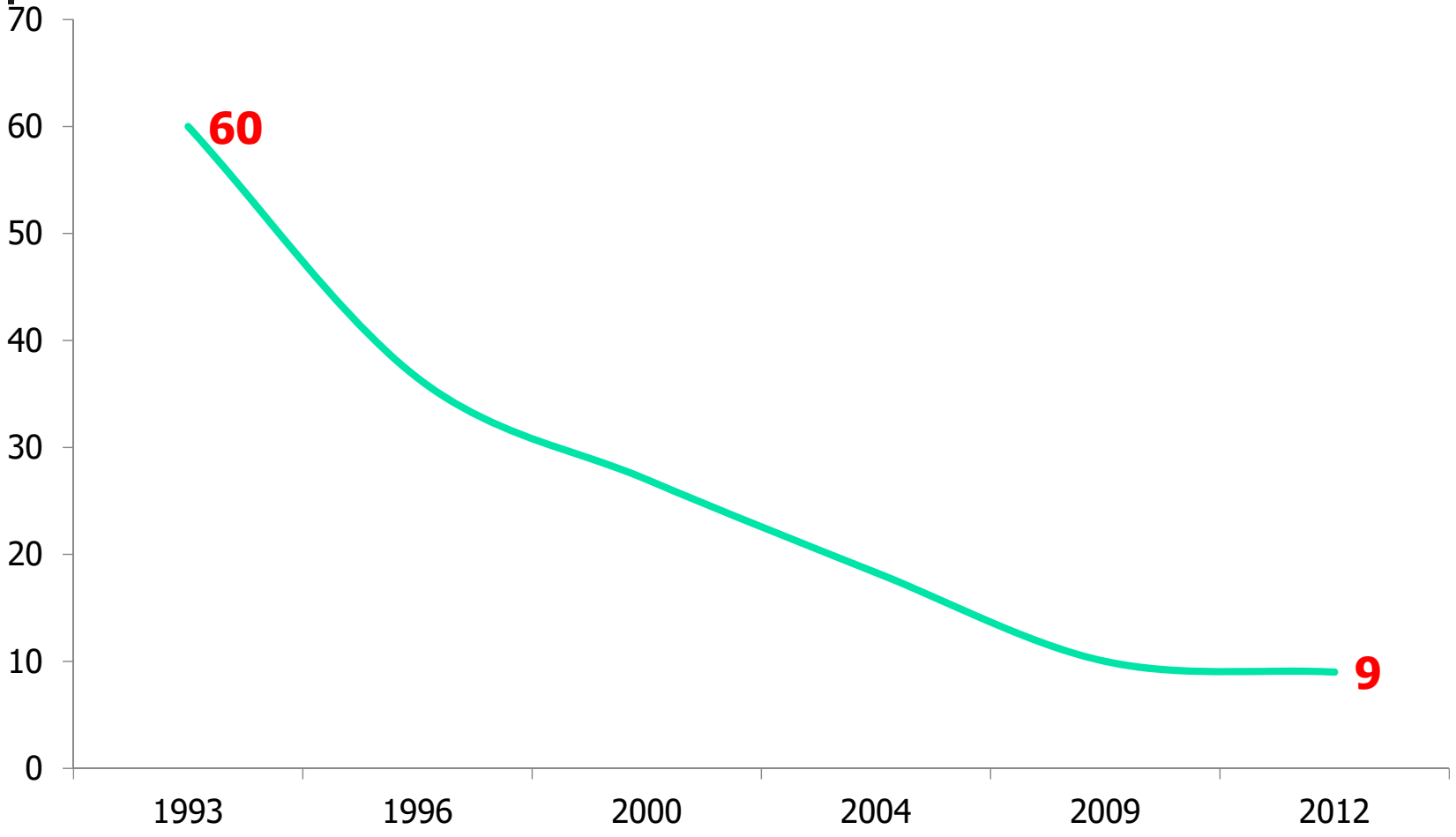
	1995	2000	2004	2012*
وفيات الأطفال				
IMR (per 1000 live births)	33	27	16.1	8
<5 MR (per 1000 live births)	40	35	18.3	9
وفيات الأمهات				
Maternal Mortality Ratio (per 100,000)	130	104	86.3	16

MMR 2008 LEB 26 (World Statistics Report Sept. 2010)

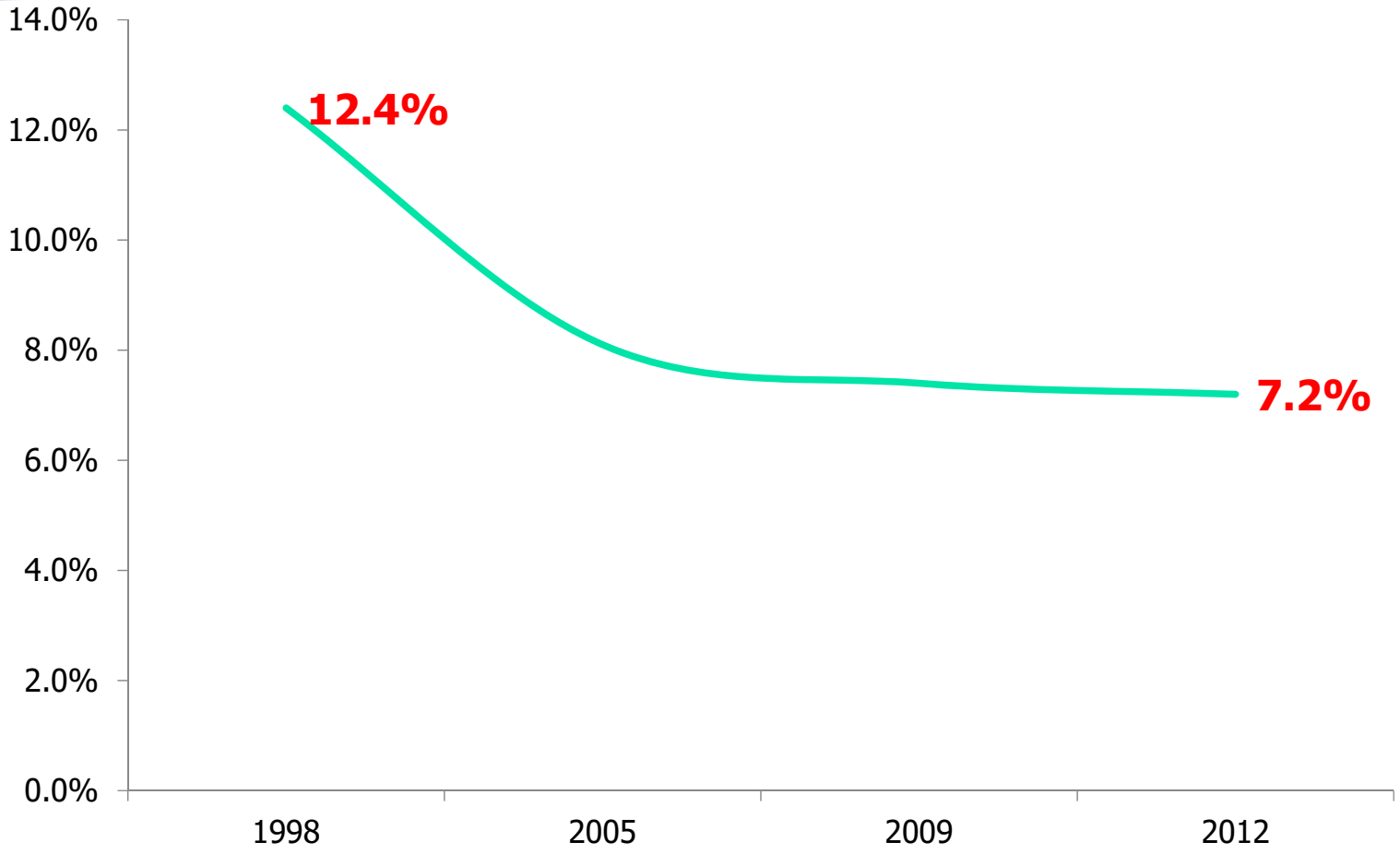
<5MR (2009) 10‰ (MICS 3, 2011)

*** World Health Statistics 2014**

معدل وفيات الأطفال ما دون الخامسة
(لكل 1000 ولادة حية)



نسبة الإنفاق على الصحة من الناتج القومي المحلي



National Health Accounts summary statistics (LBP)

	1998	2005	2012
Total population estimate	4,005,000	3,870,000	4,104,000
Total health expenditure	3,013,517,785,000	2,625,569,226,000	4,647,637,424
Per capita expenditure	752,438	678,442	1,132,465
Total GDP	24,300,000,000,000	32,411,000,000,000	64,800,000,000,000
Health expenditure as % GDP	12.4	8.1	7.2
Percent GOL budget allocated to MOPH	6.6	5.9	3.4
Sources of funds (%)			
Public	18.22	28.98	31.14
Private	79.84	70.99	68.39
Households	70.65 (OOP 60)	59.82 (OOP 44)	53.02 (OOP 37)
Employers	9.19	11.17	15.37
NGO	1.94	0.03	0.47
Distribution of health care expenditures (%)			
Hospitals including drugs &medical supplies	*24.5*	*38.0*	*40.4*
Private non-institutional providers	*41.0*	*21.0*	*11.5*
Pharmaceuticals	*25.4*	*32.0*	*34.2*
Others	*9.1*	*9.0*	*13.9*

International comparison of health expenditures per capita and as a percentage of GDP

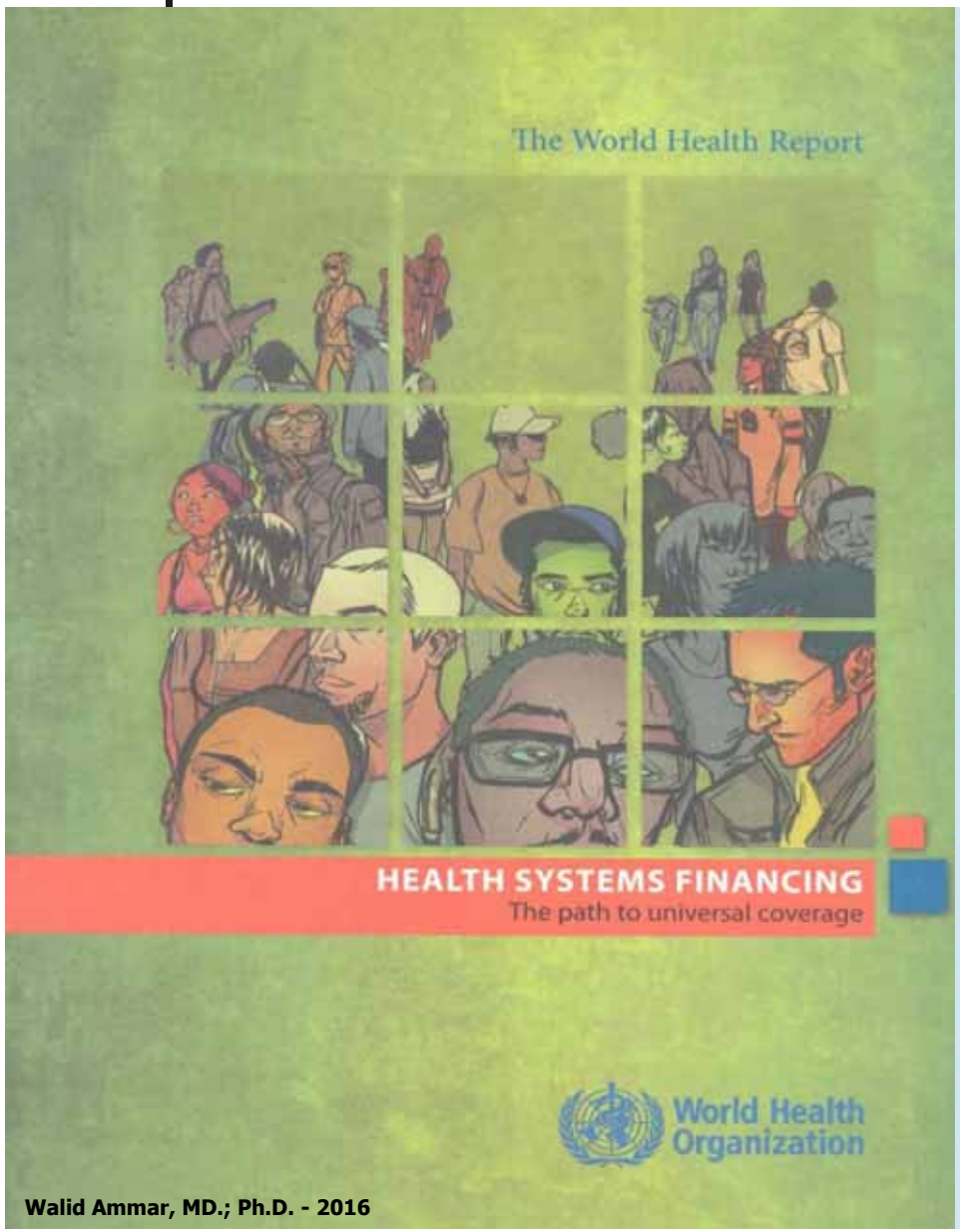
Country or Region	GDP per capita (Current US$)*	Per capita total expenditure on health (at average exchange rate (US$))**	Health Expenditures ratios**		
			Total expenditure on health as % of GDP	General government expenditure on health as % of total expenditure on health	Private expenditure on health as % of total expenditure on health
Yemen	1,289	76	5.6	1.6	4.0
UAE	41,712	1,235	3.0	2.1	0.9
Tunisia	4,188	292	7.0	4.1	2.9
Qatar	94,407	2,029	2.2	1.8	0.4
Egypt	3,226	158	4.9	1.9	3.0
Morocco	2,931	181	6.1	2.2	3.9
Jordan	4,897	351	8.0	5.5	2.5
Iran	7,711	485	6.6	2.7	3.9
Lebanon	**9,729 (10.474)*** **	**663 (751)*** **	**7.5 (7.2)*** **	**3.5 (3.4)*** **	**4.0 (3.8)*** **
East. Med. Region**	5,326	245	4.6	2.3	2.3
France	40,850	4,644	11.6	9.0	2.6
Greece	22,243	2,070	9.3	6.2	3.1
European Region**	25,506	2,270	8.9	6.5	2.4

Source: ** World Bank. 2012. World Development Indicators 2011-2015. [Online] available at: www.worldbank.org*
***WHO.2012. World Health Statistics 2015. Geneva: WHO.*
PPP: Purchasing Power Parity at International Dollar rate
**** NHA 2012, MOPH.*

Health Coverage Characteristics

- Health Expenditures per Capita 750 USD (USA 9,146 USD France 4,864 Spain 2,581)
- MOPH Coverage without contributions (beneficiaries prepayment)
- Coverage of high tech procedures and last-generation drugs
- No exclusions
- Free choice of provider
- No waiting lists

Health Reform in Lebanon: A success story in the "WHO Report 2010 on Health Care Financing"



Box 4.2. Lebanon's reforms: improving health system efficiency, increasing coverage and lowering out-of-pocket spending

In 1998 Lebanon spent 12.4% of its GDP on health, more than any other country in the Eastern Mediterranean Region. Out-of-pocket payments, at 60% of total health spending, were also among the highest in the region, constituting a significant obstacle to low-income people. Since then, a series of reforms has been implemented by the Ministry of Health to improve equity and efficiency.

The key components of this reform have been: a revamping of the public-sector primary-care network; improving quality in public hospitals; and improving the rational use of medical technologies and medicines. The latter has included increasing the use of quality-assured generic medicines. The Ministry of Health has also sought to strengthen its leadership and governance functions through a national regulatory authority for health and biomedical technology, an accreditation system for all hospitals, and contracting with private hospitals for specific inpatient services at specified prices. It now has a database that it uses to monitor service provision in public and private health facilities.

Improved quality of services in the public sector, at both the primary and tertiary levels, has resulted in increased utilization, particularly among the poor. Being a more significant provider of services, the Ministry of Health is now better able to negotiate rates for the services it buys from private hospitals and can use the database to track the unit costs of various hospital services.

Utilization of preventive, promotive and curative services, particularly among the poor, has improved since 1998, as have health outcomes. Reduced spending on medicines, combined with other efficiency gains, means that health spending as a share of GDP has fallen from 12.4% to 8.4%. Out-of-pocket spending as a share of total health spending fell from 60% to 44%, increasing the levels of financial risk protection.

The Economist Intelligence Unit

www.eiu.com/healthcare

A white paper from The Economist Intelligence Unit Healthcare

Health outcomes and cost:

A 166-country comparison

	Health spend per head	Spend rank	Outcomes index	Outcomes rank	Cost per outcome point
	US$	166=high	100= high	166=high	US$
Japan	4,714	153	98.4	166	47.9
Singapore	2,538	145	95.5	165	26.6
Switzerland	8,928	164	95.1	164	93.9
Iceland	3,869	149	94.1	163	41.1
Australia	6,173	161	94.1	162	65.6
Italy	3,044	147	94.1	161	32.4
Spain	2,717	146	93.8	160	29.0
Cyprus	1,929	140	92.8	159	20.8
Israel	2,440	144	92.5	158	26.4
Sweden	5,258	157	92.5	157	56.8
France	4,959	155	92.2	156	53.8
New Zealand	4,061	151	91.9	155	44.2
Canada	5,692	159	91.6	154	62.1
Norway	8,985	165	90.8	153	98.9
South Korea	1,834	137	90.8	152	20.2
Austria	5,355	158	90.6	151	59.1
Luxembourg	7,282	163	90.5	150	80.5
Netherlands	6,103	160	90.3	149	67.6
Germany	4,964	156	89.8	148	55.3
Finland	4,354	152	89.7	147	48.5
Ireland	3,928	150	89.4	146	44.0
Malta	1,902	138	89.2	145	21.3
United Kingdom	3,679	148	89.0	144	41.3
Belgium	4,901	154	88.7	143	55.2
Portugal	1,913	139	88.3	142	21.7
Greece	2,077	142	88.3	141	23.5
Costa Rica	952	122	87.1	140	10.9
Chile	1102	129	87.0	139	12.7

	Health spend per head	Spend rank	Outcomes index	Outcomes rank	Cost per outcome point
	US$	166=high	100= high	166=high	US$
Slovenia	1,941	141	87.0	138	22.3
Qatar	2,275	143	86.9	137	26.2
Denmark	6,307	162	86.2	136	73.2
32 **Lebanon**	**684**	**112**	**85.9**	**135**	**8.0**
United States	9,216	166	85.5	134	107.8
Kuwait	1,144	130	85.0	133	13.5
Czech Republic	1,419	135	82.7	132	17.2
Bahamas	1,657	136	82.3	131	20.1
Bahrain	958	123	82.1	130	11.7
Ecuador	376	88	81.9	129	4.6
Brunei Darussalam	951	121	81.8	128	11.6
Peru	338	87	81.7	127	4.1
Cuba	484	99	81.6	126	5.9
Barbados	941	119	81.0	125	11.6
Panama	721	113	80.9	124	8.9
United Arab Emirates	1,394	134	80.8	123	17.3
Uruguay	1,331	133	80.6	122	16.5
Saudi Arabia	813	114	80.5	121	10.1
China	337	86	80.5	120	4.2
Colombia	521	103	80.4	119	6.5
Croatia	891	118	80.2	118	11.1
Tunisia	291	79	79.8	117	3.6
Bosnia and Herzegovina	437	97	79.6	116	5.5
Argentina	1,232	131	79.4	115	15.5
Mexico	639	109	79.3	114	8.1
Poland	852	116	78.9	113	10.8
Oman	557	107	78.4	112	7.1
Estonia	1,020	126	78.4	111	13.0

WORLD ECONOMIC FORUM

COMMITTED TO IMPROVING THE STATE OF THE WORLD

Insight Report

The Global Competitiveness Report 2016–2017

Klaus Schwab, World Economic Forum

A. Health

Rank / 138	Country / Economy	Score	Trend	Distance from best
1	Japan	7.0		
2	Spain	7.0		
3	Italy	7.0		
4	Luxembourg	7.0		
5	Iceland	7.0		
6	Switzerland	6.9		
7	Australia	6.9		
8	Hong Kong SAR	6.9		
9	Sweden	6.9		
10	Norway	6.9		
11	Israel	6.9		
12	France	6.9		
13	Singapore	6.9		
14	Finland	6.9		
15	Canada	6.9		
16	Austria	6.9		
17	Netherlands	6.9		
18	Ireland	6.9		
19	Greece	6.9		
20	Slovenia	6.9		
21	Malta	6.9		
22	Germany	6.9		
23	New Zealand	6.9		
24	United Kingdom	6.9		
25	Denmark	6.9		
26	Belgium	6.9		
27	Cyprus	6.9		
28	Portugal	6.9		
29	Chile	6.9		
30	Korea, Rep.	6.8		
31	Taiwan, China	6.8		
32	Czech Republic	6.8		
33	United States	6.8		
34	Lebanon	6.8		
35	Costa Rica	6.8		
36	Croatia	6.8		
37	Qatar	6.8		
38	Estonia	6.7		
39	United Arab Emirates	6.7		
40	Poland	6.7		
41	Slovak Republic	6.7		
42	Bahrain	6.7		
43	Montenegro	6.7		
44	Bosnia and Herzegovina	6.7		
45	Hungary	6.7		
46	Oman	6.7		

Rank / 138	Country / Economy	Score	Trend	Distance from best
70	Tunisia	6.5		
71	Jordan	6.5		
72	Venezuela	6.5		
73	Georgia	6.5		
74	Brazil	6.5		
75	Colombia	6.5		
76	Ecuador	6.5		
77	Nicaragua	6.4		
78	El Salvador	6.4		
79	Peru	6.4		
80	Paraguay	6.4		
81	Honduras	6.4		
82	Russian Federation	6.4		
83	Ukraine	6.4		
84	Vietnam	6.4		
85	Thailand	6.4		
86	Algeria	6.3		
87	Egypt	6.3		
88	Kazakhstan	6.3		
89	Morocco	6.3		
90	Trinidad and Tobago	6.3		
91	Dominican Republic	6.3		
92	Moldova	6.3		
93	Guatemala	6.3		
94	Cape Verde	6.3		
95	Azerbaijan	6.2		
96	Kyrgyz Republic	6.2		
97	Mongolia	6.1		
98	Bangladesh	6.0		
99	Bhutan	6.0		
100	Nepal	6.0		
101	Tajikistan	6.0		
102	Bolivia	5.9		
103	Philippines	5.9		
104	Yemen	5.8		
105	India	5.8		
106	Cambodia	5.7		
107	Indonesia	5.7		
108	Rwanda	5.6		
109	Madagascar	5.5		
110	Lao PDR	5.5		
111	Ethiopia	5.5		
112	Senegal	5.5		
113	Mauritania	5.3		
114	Pakistan	5.3		
115	Kenya	5.1		

Health System Resilience

W. Ammar, O. Kdouh, R. Hammoud, H. Harb, Z. Ammar, R. Atun, D. Christani, P. A. Zalloua. Health System Resilience: Lebanon and the Syrian refugee crisis.
Journal of Global Health doi:10.7186/jogh.06.020704. vol. 6 No.2. Dec. 2016.

Capacity to absorb pressures and shocks, to prevent or contain outbreaks, to maintain its institutions functional and sustain achievements.

The massive influx of Syrian refugees represented a great challenge to the health system

- Public and Private health institutions remained operational at the level of governance, financing and provision .
- The health system was capable to absorb the significant increase in demand.
- Major outbreaks were controlled (measles, hep. A) or prevented (Polio, leishmaniasis, cholera…)
- MDGs 4 & 5 achieved