

Health Care Systems in Transition

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Foreword

The Health Care Systems in Transition (HiT) profiles are country-based reports that provide an analytical description of each health care system and of reform initiatives in progress or under development. The HiTs are a key element that underpins the work of the European Observatory on Health Care Systems.

The Observatory is a unique undertaking that brings together the WHO Regional Office for Europe, the Governments of Greece, Norway and Spain, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine. This partnership supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of the dynamics of health care systems in Europe.

The aim of the HiT initiative is to provide relevant comparative information to support policy-makers and analysts in the development of health care systems and reforms in the countries of Europe and beyond. The HiT profiles are building blocks that can be used to:

- learn in detail about different approaches to the financing, organization and delivery of health care services;
- describe accurately the process and content of health care reform programmes and their implementation;
- highlight common challenges and areas that require more in-depth analysis;
- provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in the different countries of the European Region.

The HiT profiles are produced by country experts in collaboration with the research directors and staff of the European Observatory on Health Care Systems. In order to maximize comparability between countries, a standard template and questionnaire have been used. These provide detailed guidelines

and specific questions, definitions and examples to assist in the process of developing a HiT. Quantitative data on health services are based on a number of different sources in particular the WHO Regional Office for Europe health for all database, Organisation for Economic Cooperation and Development (OECD) health data and the World Bank.

Compiling the HiT profiles poses a number of methodological problems. In many countries, there is relatively little information available on the health care system and the impact of reforms. Most of the information in the HiTs is based on material submitted by individual experts in the respective countries, which is externally reviewed by experts in the field. Nonetheless, some statements and judgements may be coloured by personal interpretation. In addition, the absence of a single agreed terminology to cover the wide diversity of systems in the European Region means that variations in understanding and interpretation may occur. A set of common definitions has been developed in an attempt to overcome this, but some discrepancies may persist. These problems are inherent in any attempt to study health care systems on a comparative basis.

The HiT profiles provide a source of descriptive, up-to-date and comparative information on health care systems, which it is hoped will enable policy-makers to learn from key experiences relevant to their own national situation. They also constitute a comprehensive information source on which to base more in-depth comparative analysis of reforms. This series is an ongoing initiative. It is being extended to cover all the countries of Europe and material will be updated at regular intervals, allowing reforms to be monitored in the longer term. HiTs are also available on the Observatory's website at <http://www.observatory.dk>.

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The current series of Health Care Systems in Transition profiles has been prepared by the research directors and staff of the European Observatory on Health Care Systems.

The European Observatory on Health Care Systems is a partnership between the WHO Regional Office for Europe, the Governments of Greece, Norway and Spain, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine. The Observatory team working on the HiT profiles is led by Josep Figueras, Head of the Secretariat, and research directors Martin McKee, Elias Mossialos and Richard Saltman. Technical coordination is carried out by Suszy Lessof.

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List of abbreviations

- CEE – countries of central and eastern Europe
- EC – European Commission
- ECHO – European Commission Humanitarian Office
- EDL – essential drugs list
- EU-Phare – The EU’s programme for aid and economic restructuring
- GDP – Gross domestic product DM – German deutsche Mark
- GDP – gross domestic product
- GNP – Gross national product
- GP – general practitioner
- HDZ- Bosnia and Herzegovina – Hrvatska Demokratska Zajednica Bosne i Hercegovine (Croatian Democratic Party of Bosnia and Herzegovina)
- ICRC – International Committee of the Red Cross
- IFOR – Operation Joint Endeavour
- IPTF – United Nations International Police Task Force
- KM – Konvertible Mark (Bosnia and Herzegovina’s national currency)
- MSF - Médecins Sans Frontières
- NATO – North Atlantic Treaty Organization
- NGO – non-governmental organization
- OECD – Organization of Economic Co-operation and Development
- OHR – Office of the High Representative of the International Community in Bosnia and Herzegovina
- OSCE – Organization for Security and Cooperation in Europe

OTC – over the counter

PPP – purchasing power parity SbiH – Stranka for BiHSDA –Party for Democratic action

SDP – Social-Democratic Party of Bosnia and Herzegovina

SDS – Srpska Demokratska Stranka (Serbian Democratic Party)

SFOR – Stabilization Force in Bosnia and Herzegovina

SMICs – Self managed community of interest

SNSD – Union of Independent Social Democrats

WHO – World Health Organization

UNHCR – United Nations High Commission for Refugees

UNICEF – United Nations Children’s Fund

Introduction and historical background

Introductory overview

Geography

Bosnia and Herzegovina, one of the sovereign republics that constituted the former Yugoslavia, is located in the western part of the Balkan Peninsula and covers an area of 51 129 km². It shares international borders with Croatia to the north, south and west, and with the Federal Republic of Yugoslavia's¹ Serbian and Montenegrin republics to the east (see Fig. 1). Bosnia and Herzegovina has a 9-km stretch of Dalmatian coast, which includes the tourist town of Neum. The eastern and central regions of the country have a sub-continental climate with cold winters followed by hot summers, and the south-west coastal hinterland has a Mediterranean climate. Three quarters of Bosnia and Herzegovina belongs to the Black Sea Basin, a system of rivers feeding the Black Sea, which lies on the eastern side of the peninsula. The rivers of the remaining quarter of the country flow to the Adriatic Sea.

Bosnia and Herzegovina comprises two entities: the Federation of Bosnia and Herzegovina (Federacija Bosna i Hercegovina) and the Republika Srpska, as well as the independently administered district of Brčko – over which neither Republika Srpska nor the Federation of Bosnia and Herzegovina have jurisdiction. Each of the above-mentioned two entities cover about 25 000 km² of land.

¹ When this document went to press, the Federal Republic of Yugoslavia had recently signed the Belgrade Agreement, an agreement that, among other things, changed the country's name to Serbia and Montenegro. By the early 2003, the Federal Republic of Yugoslavia will be replaced by the name "Serbia and Montenegro".

Fig. 1. Map of Bosnia and Herzegovina²

Map No. 3729 Rev. 2 UNITED NATIONS
January 2000

Department of Public Information
Cartographic Section

Source: United Nations Cartographic Section, 2002: <http://www.un.org/Depts/Cartographic/map/profile/bosnia.pdf>

² The maps presented in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the European Observatory on Health Care Systems or its partners concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitations of its frontiers or boundaries.

Population overview

The prewar population, according to the last census taken in 1991, was 4 518 456 citizens, 43.7% of whom identified themselves as Bosniaks (Bosnian Muslims), 31.3% as Bosnian Serbs and 17.3% as Bosnian Croats. A further 7.7% were either of other ethnic origins or identified themselves as Yugoslavs. Approximately three fifths of the population were urban residents, with the remaining two fifths living in rural areas. Until 1992, Bosnia and Herzegovina had 109 municipalities and the capital city was Sarajevo (with 10 municipalities and a total of 525 980 citizens).

Ethnicity and religion are relevant issues in Bosnia and Herzegovina. As noted above, there are three main ethnic groups, Bosniak, Croat and Serb, yet Bosnia and Herzegovina is also a host to other ethnic groups, including Roma. The main religions practised in Bosnia and Herzegovina are Islam, Orthodox Christianity, Roman Catholicism, in addition to which there are small Adventist and Jewish communities. The official languages of Bosnia and Herzegovina are (in alphabetical order): Bosnian, Croatian and Serbian. For additional information on the distribution of these groups, please see the following website: <http://www.unhcr.ch/>.

An official census of the population has not yet been undertaken in the postwar period. Estimates vary from about 3.6 million to 3.97 million inhabitants.

Historical background

The earliest statehood claims of Bosnia and Herzegovina date back to between the tenth and twelfth century. The modern boundaries of Bosnia which hold today were agreed upon in Jajce in 1943, as a part of boundary making for the whole of Yugoslavia.

The breakup of the former Yugoslavia has attracted a great deal of attention from international historians, scholars, and journalists. Although this document provides a basic introduction to this process, it is by no means to be considered to be comprehensive. For further information on the breakup of the former Yugoslavia and the history of Bosnia, please see the Bibliography (at the end of this document) for publications by the following authors: Noel Malcom, Richard Holbrooke, Robert D. Kaplan, Carl Bilt and Laura Silber.

In 1990, the first democratic, multiparty elections were held in Bosnia and Herzegovina, and in early 1992 Bosnia and Herzegovina became an independent country. At that time, it had a multiparty democratic system and a 240-member

parliament located in Sarajevo. In April 1992, Bosnia became a member of the United Nations and a member of the World Health Organization (WHO). The planned transition from a socialist system to a market economy was interrupted by the war that commenced in April 1992 and continued until the signing of the Dayton Agreement in 1995.

War and peace

The violence that marked the early years of the Bosnian state erupted from the unravelling of the former Yugoslavia in the early 1990s: Slovenia declared independence in July 1991 and experienced a brief armed conflict with the Yugoslavian national army from June to July. Croatia declared independence in December 1991, and war broke out in the Croatian regions of Krajina and Slavonia. A referendum on independence was held in March 1992 in Bosnia; days later the first fighting broke out, and parallel regimes took power within Bosnia. During the war central Bosnia and Herzegovina became a patchwork of razed villages, defended enclaves, competing armies, and shifting front lines, leaving behind a legacy of nearly a million landmines, a million internally displaced persons and 800 000 refugees worldwide.

In March and May of 1994, a partial peace agreement was brokered in Washington, DC. The Washington Agreement created the Federation of Bosnia and Herzegovina and established a lasting peace between the Croats and the Bosniaks. This eventually led to a united offensive against the third combatant, the Bosnian Serbs.

In November 1995, the tripartite Dayton peace talks between Bosnian President Alija Izetbegović, Croatian President Franjo Tuđman and Serbian President Slobodan Milošević led to the signing of the General Framework Agreement for Peace in Bosnia and Herzegovina (Dayton Agreement) on 14 December in Paris. The Dayton Agreement recognized the existence of two entities: the Federation of Bosnia and Herzegovina and Republika Srpska. Under this Agreement, the united territory held by Croat and Bosniak forces (the Federation of Bosnia and Herzegovina) was organized into ten semi-autonomous cantons, following a system derived from the Swiss model. The cantons are as follows: Bosansko Podrinjski, Hercegbosanski, Hercegovacko-neretvanski, Posavski, Sarajevski, Srednjobosanski, Tuzlansko-podrinjski, Unsko-sanski, Zapadnohercegovacki and Zenicko-dobojski. The cantonal system was meant to prevent one ethnic group from dominating another, in keeping with the European tendency towards regional decentralization and minority rights. Republika Srpska was in turn organized into two main regions: the north-west (subdivided into two regions) and the eastern part (subdivided into five regions). Brčko, a city on the Sava River (which the Dayton Agreement did not allocate

to either entity), became an autonomous district on 8 March 2000 by decision of the High Representative;³ the agreement on the implementation of entity obligations from the final arbitral award for Brčko on health care and health insurance was signed only on 9 October 2000.

The Dayton Agreement envisaged the return of refugees and displaced people to their homes, prosecution of accused war crime suspects, the establishment of internationally supervised national, regional and municipal elections, and demilitarization of the country. In early 1996, a peacekeeping force of 60 000 NATO-led Implementation Force (IFOR) troops from more than 30 countries took up positions around the country. This peacekeeping force was the forerunner to the current Stabilization Force (SFOR, with about 19 000 troops) that is still in place in Bosnia and Herzegovina.

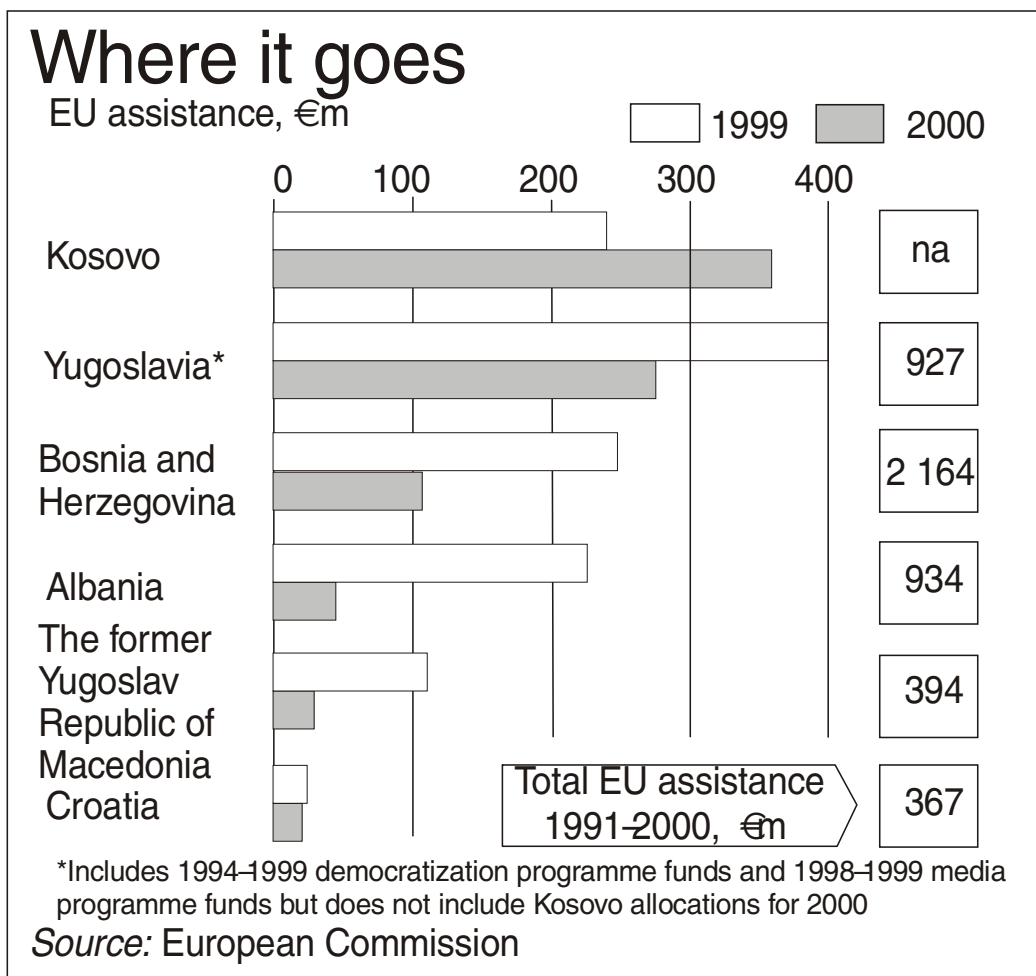
Through the framework for peace, a substantial economic, military and political commitment was made by international aid organizations and governments to ensure the security, stability and reconstruction of the country. In the context of the Dayton Agreement, the so-called Priority Reconstruction Programme was designed and endorsed by the Bosnia and Herzegovina government authorities and international donors (mainly the World Bank and the European Commission) in April 1996. The programme had an overall budget of over US \$5.1 billion⁴ and included donations from other groups. Funding support from the international community (see Fig. 2) has been maintained at a significant scale – for example, through the European Commission Humanitarian Office (ECHO) and Phare (programme for aid and economic restructuring) programmes, in the case of the European Union (EU).

Between 1998 and 2000, most of the crucial joint decisions were made by the Office of the High Representative (OHR), which the Dayton Agreement established to monitor the implementation of the peace settlement, provide guidance to the United Nations International Police Task force (IPTF) and oversee civilian aspects of the Agreement. Some of the OHR decisions include unified licence plates for ease of travel between the two entities, a unified currency, a Bosnia and Herzegovina national flag and passports for international travel. Many times the OHR has made use of its right to dismiss any official in the Bosnia and Herzegovina administration who did not abide by the rules, which it did with the President of Republika Srpska and the Federal Minister of Agriculture. The strong role of OHR in working to coordinate civilian organizations and agencies, in mitigating tensions between the two entities,

³ Among other things, the Dayton Agreement established the Office of the High Representative (OHR) to monitor the implementation of the peace settlement, provide guidance to the United Nations International Police Task Force and oversee civilian aspects of the agreement.

⁴ Office of the High Representative of the International Community in Bosnia (OHR), Sarajevo. (<http://www.ohr.int/>) (accessed 10 December 2001).

Fig. 2. European Union assistance programmes, by recipient, 1999-2000



Source: More cash, please, *The Economist*, 23 November: (2000)

and in serving as an active body reflects a lingering key trait of the decision-making process at the state level and entity level – that is, the lack of consensus and complete dichotomy of opinions on the same issues held by ruling political parties in Bosnia and Herzegovina.

The first postwar national and regional elections were held in September 1996: voter turnout was overwhelming. With over 75% of the vote, the elections proved to be a clear victory for the leading national parties of the three ethnic groups. Political clashes in Republika Srpska in 1997, however, splintered the ruling Srpska Demokratska Stranka (Serbian Democratic Party, SDS) party, dissolved the parliament and moved the capital from Pale to Banja Luka – resulting in a new round of internationally supervised parliamentary elections. The new government received renewed economic and political support from the international community, which promoted the return of internally displaced persons and refugees.

The governmental system of today

The central Bosnia and Herzegovina government: the ‘Council of Ministers of Bosnia and Herzegovina’

Based on the Dayton Agreement, Bosnia and Herzegovina is a democratic, independent country whose basic principles – respect of human rights, equality and tolerance, continuation of international legal sovereignty, and democratic transformation of its internal systems – are rooted in the constitution of Bosnia and Herzegovina and in the Dayton Agreement. With this foundation, the country is continuing to create a democratic central government within the entities, regions/cantons and municipalities, including Brčko District, which holds a different status (as already mentioned).

The two distinct entities formed by the Dayton Agreement can be described as first-order administrative divisions: the Federation of Bosnia and Herzegovina (Federacija Bosne i Hercegovine) and Republika Srpska. Administratively and legally, these two governmental entities are divided further into 10 cantons in the Federation of Bosnia and Herzegovina, 7 regions in Republika Srpska and 156 municipalities overall, plus Brčko District. Suffrage is universal and applies from 18 years of age, regardless of any other consideration. Bosnia and Herzegovina has close to 30 political parties, some with a strong ethnic identity.

The central government of Bosnia and Herzegovina has a tripartite division of powers, as follows:

1. The legislative branch is represented by the bicameral Parliamentary Assembly (Skupstina), which consists of the National House of Representatives or Predstavnicki Dom (42 seats: 14 Bosniak, 14 Croat and 14 Serb; members are elected by popular vote to serve 2-year terms) and the House of Peoples or Dom Naroda (15 seats: 5 Bosniak, 5 Croat and 5 Serb; members are elected by the Federation’s House of Representatives and Republika Srpska’s National Assembly to serve 2-year terms). The Parliamentary Assembly is charged with conducting foreign, economic, fiscal and trade policy, and with regulating telecommunications, utilities, immigration and asylum policy, inter-entity transportation, air traffic control, and the Bosnia and Herzegovina Border Service. The governments of the Federation of Bosnia and Herzegovina and Republika Srpska are charged with overseeing internal functions; this includes all activities related to health.
2. The executive branch is represented by a three-member presidency (representing each ethnic group) elected by popular vote for a 4-year term, with an 8-month rotation of the chairman and the cabinet (Council of Ministers). The current, recently elected presidency members are: Dragan

Čović (Croat, HDZ), Mirko Šarović (Serb, SDS) and Sulejman Tihić (Bosniak, SDA).

3. Finally, the judicial branch consists of the constitutional court. It consists of nine members: four are selected by the Federation's House of Representatives, two by Republika Srpska's National Assembly, and three non-Bosnian members by the President of the European Court of Human Rights.

The Bosnia and Herzegovina Constitutional Court issued a ruling on 30 June 2000 and 1 July 2000 that granted equal rights to the three ethnic constituencies of Bosnia and Herzegovina throughout the entire territory of the country; this was confirmed by the OHR on 5 July 2000. The implementation of this ruling has been delayed on several occasions. To mitigate the lack of implementation, the OHR has restructured and downsized the Constitutional Commission.

Entity governments

Republika Srpska has its own legislative and executive branches. The legislative branch is the unicameral Republika Srpska National Assembly, consisting of 83 members. The National Assembly has power over taxation, privatization, police, military, education, health and other public services. The Assembly also supervises the municipal assemblies and has the power to overrule decisions taken at the municipal level. An elected president and vice-president chair the executive branch; upon election, the president appoints a prime minister to fulfil daily oversight responsibility and to assemble a cabinet of ministers.

The Federation's government is largely devolved to 10 cantons that form the Federation, and each has a legislative and executive branch. The Federation's legislative branch is a bicameral legislature, with a directly elected Federation House of Representatives and a Federation House of Peoples elected by the 10 cantonal legislatures; these entity-level powers are responsible for defence, economic policy, privatization, energy, regulation of the Federation non-media frequency spectrums, intercantonal law enforcement and Federation fiscal policy. The President and Vice President of the Federation are nominated by the House of Peoples and elected by the Federation House of Representatives. The Federation executive proceeds to appoint a prime minister and a deputy from the House of Representatives.

The ten Federation of Bosnia and Herzegovina cantons share responsibility with the Federation government for health, natural resources and environment, social welfare, education, tourism, and other public services. Each canton has a citizen-elected legislature, with proportional representation of any party receiving at least 3% of votes; each cantonal legislature elects a cantonal president and ratifies the appointment of cantonal judges. The cantons coordinate

police forces, education, cultural and public service policy, housing, and land use; they also regulate and promote local business, ensure availability of local energy, regulate local radio and television facilities, and implement social and welfare policies. In addition, the cantons collect taxes and submit a proportion of the funds to the Federation entity level.

General elections 2000

A new round of internationally observed, general elections were held on 11 November 2000. The total voter turnout, including absentee and out-of-country ballots, was some 1.6 million, or 64.4% of the electoral roll (Organization for Security and Cooperation in Europe mission to Bosnia and Herzegovina). Voters in Republika Srpska cast ballots for a new president and vice president, members of the National Assembly and members of the Bosnia and Herzegovina House of Representatives. In the Federation of Bosnia and Herzegovina, voters decided on new members of the House of Representatives and on members of cantonal assemblies.

In Republika Srpska, the Serb Democratic Party (SDS) returned to power in the presidential office, receiving 50.4% of the vote. The electorate voted the SDS, Union of Independent Social Democrats (SNSD), and Party of Democratic Progress (PDP) to the unicameral National Assembly and the SDS, PDPRS and the SNSD–Democratic Socialist Party (DSP) coalition to represent Republika Srpska in the House of Representatives in the Parliamentary Assembly of Bosnia and Herzegovina.

Voters in the Federation elected representatives of the Social-Democratic Party of Bosnia and Herzegovina (SDP), Party for Democratic Action (SDA), Croatia Democratic Party of Bosnia and Herzegovina (Hrvatska Demokratska Zajednica Bosne i Hercegovine HDZ and Party (Stranka) for Bosnia and Herzegovina (SbiH) to represent the Federation in the House of Representatives of the Bosnia and Herzegovina Parliamentary Assembly. The Federation's cantons elected multiple parties to their cantonal assemblies, but in most cantons the election results were dominated by the majority ethnic groups residing in each canton.

Elections 2002

On 5 October 2002, Bosnia and Herzegovina held its first, non-internationally supervised election. With the lowest turn out since the end of the war, 55% of registered voters, the country elected to bring back the traditional ethnically aligned HDZ, SDA and SRS parties, to fill the positions of the joint presidency, the Parliament of the Republic of Bosnia Herzegovina and the parliaments of

the Federation and Republika Srpska. In the central parliament, the SDA won 28 seats for the Federation of Bosnia and Herzegovina, and the SDS won 14 seats for Republika Srpska. In the chamber of representatives of the Federation, SDA won 33.3% of the vote, ahead of HDZ (17.5%). In the National Assembly of Republika Srpska, the SDS won 33.4% of the vote followed by the SNSD with 27.4% of the vote.

Demography and health

As mentioned previously, all population-based data in Bosnia and Herzegovina are estimates, since an official census of the population has not yet been undertaken since the war ended.

The war had a strong impact on the demographic and health situation. Different documents quote various estimates of the number of deaths during the war, ranging from about 140 000 people (3% of population) to 200 000 people. The indicative numbers of people wounded range from 170 000 to 240 000 (100 000 of which were severely wounded and 25 000 left with permanent disabilities, although estimates also vary widely between different sources). It is estimated that between at least 16 000 and 17 000 children died and that perhaps another 40 000 were wounded. Several hundred thousand people are still living as refugees outside the borders of Bosnia and Herzegovina and about a third of the citizens currently living within its territory fall under the United Nations High Commission for Refugees' (UNHCR) category of concern – that is, claim status as refugee or internally displaced person.⁵

Tables 1 and 2 provide an overview of the demographic indicators for the Federation of Bosnia and Herzegovina and Republika Srpska for the last decade. According to 1998 estimates and compared with the 1991 census, the population is believed to have decreased by more than 16%, and the age structure of the census population in 1991 was nearly stationary and regressive. Based on current estimates, the population above the age of 65 (Table 1) has now increased to 11% (from 6% in 1991). The birth rate in Bosnia and Herzegovina in 1991 was 14.9 births per 1000 population, while in 1998 (again based on current estimates) it was substantially reduced to 11.6 births per 1000 population, and has recovered somewhat to 12.9 births per 1000 population in the year 2000.

The current mortality rate remains roughly the same as that of the pre-war period. The life expectancy of Bosnia and Herzegovina citizens before the war

⁵ A distinction must be made between the terms “refugee” and “internally displaced person” (IDP). Refugees residing in Bosnia and Herzegovina are those who have crossed an international border to enter the country. In general, refugees residing in Bosnia and Herzegovina come from Croatia, Kosovo and Yugoslavia, and an internally displaced person is someone who has been displaced as a result of the war and has not yet returned to the entity, town or village where their pre-1992 home was located.

was 72.92 years, roughly in the middle of the central and eastern European average. The ranking of the main causes of death before the war was in line with the trends of European countries, including an increasing number of chronic diseases, neoplasms (lung cancer for men and breast cancer for women), diseases of the circulatory system and external causes. The leading causes of death for men and women between the ages of 20 and 64 years were myocardial infarction and cerebrovascular disease. There are no precise standardized figures on causes of death in Bosnia and Herzegovina today, but it is estimated that there has not been major changes as compared with the pre-war period.

Table 1. Demographic indicators: Bosnia and Herzegovina, 1991-2001

Indicators	1991	1998	2001
Population (in millions)	4.5	3.7	4.1
% population 65 years and older	6.3	11.0	9.6 (estimated)
Birth rate (per 1000 population)	14.3	11.6	10.4 (2000)
Death rate (per 1000 population)	6.7	–	8.1 (estimated)
Life expectancy of women (in years)	7.9	–	74.9 (estimated)
Life expectancy of men (in years)	69.5	–	69.3 (estimated)
Maternal mortality (per 100 000 live births)	26.6	–	–
Infant mortality (per 1000 live births)	14.6	–	23.5 (estimated)

Sources: WHO Regional Office for Europe health for all database; WHO Liaison Office, World Bank, Central Intelligence Agency Factsheet 2002; UNICEF TransMONEE database.

Table 2. Demographic indicators: Federation of Bosnia and Herzegovina, 1998-2000

Indicators	1998	2000
Population (in millions)	2.2	2.5
% population 65 years and older	11.0 ^a	9.0
Birth rate (per 1000 population)	11.6 ^a	12.9 ^a
Death rate (per 1000 population)	–	7.9
Life expectancy of women (in years)	73 (both sexes)	74.4
Life expectancy of men (in years)	73 (both sexes)	68.8
Maternal mortality (per 100 000 live births)	–	10.0
Infant mortality (per 1000 live births)	–	11.7

Sources: WHO Regional Office for Europe health for all database; WHO Liaison Office, World Bank, Central Intelligence Agency Factsheet 2000; UNICEF TransMONEE database.

Notes: ^a Bosnia and Herzegovina.

Table 3. Demographic indicators: Republika Srpska, 1998-1999

Indicators	1998	1999
Population (in millions)	1.43	1.45
% population 65 years and older	11.0 ^a	–
Birth rate (per 1000 population)	9.4	10.0
Death rate (per 1000 population)	8.7	8.5
Life expectancy women (in years)	74	74
Life expectancy men (in years)	71	71
Maternal mortality (per 100 000 live births)	–	8.11
Infant mortality (per 1000 live births)	8.3	8.2

Sources: Republika Srpska Institute for Statistics, Statistic report, 2000; WHO Regional Office for Europe health for all database.

Notes: ^a Bosnia and Herzegovina.

Psychological traumas resulting from the war, such as anxiety, depression, post-traumatic stress disorder, sleeplessness, behavioural disorders, obsessive memories, irrational fear and the inability to form emotional bonds, cannot always be satisfactorily quantified, but are expected to continue to be a health challenge for the next generation. To some degree, figures showing an increase in substance abuse, suicides, domestic violence, juvenile delinquency and divorce in Bosnia and Herzegovina are a reflection of these traumas. More data outlining the impact of mental health on Bosnian society will become available in early 2003 as a part of analyses undertaken in the World Bank Living Standards Measurement Survey (LSMS).

There are also lingering health problems due to environmental factors (such as air pollution from metallurgical plants), limited sites for disposing of urban waste, water shortages, and the destruction of infrastructure due to the war.

The disease burden attributed to unhealthy lifestyles, which was estimated to be high before the war, is suspected to be increasing after the war – due to sharp fall in socioeconomic conditions. Smoking is a substantial problem, and some groups are already labelling smoking as the main public health scourge. Drug abuse seems also to be increasing significantly.

In recent years, many surveys in both the Federation of Bosnia and Herzegovina and in Republika Srpska have provided useful information for policy-making and include the following: a reproductive health survey (both entities); behaviour of school children survey (both entities); a survey on noncommunicable diseases (including malignant diseases), the CINDI Health Monitor Survey (both entities) and a risk factor assessment of noncommunicable diseases (Republika Srpska). Additional information on disease burden will become available in early 2003 resulting from surveys undertaken as a part of the World Bank-financed Basic Health Project. This includes: risk factors for

noncommunicable diseases, health status, service utilization and children and youth.

Socioeconomic development

Although still one of the largest agriculturally based countries in Europe, Bosnia and Herzegovina experienced rapid economic expansion in the twentieth century. At the end of the Second World War, more than two thirds of the population of Bosnia and Herzegovina made a living from the production of agricultural goods; by 1981, however, that figure had dropped to only a fifth. National resources include coal, iron, bauxite, manganese, forests, copper, chromium, lead, zinc and hydroelectric power. In the years before the war, key industries included automobile manufacturing, chemicals, metals and timber, and hydroelectric and thermal power.

The prewar economy of Bosnia and Herzegovina had many internal structural problems that were similar to those of neighbouring countries of central and eastern Europe (CEE). The extensive economic development at the end of the 1970s was followed by a drop in the gross domestic product (GDP) in the 1980s and by a uniform economic stagnation up to and through the 1990s. The GDP per person in 1990 was US\$4780, with an inflation rate of 68%. In 1990/1991, the economy of Bosnia and Herzegovina was based mainly on industry (52.6% of the GDP), while services and agriculture contributed 39% and 8%, respectively. When Bosnia and Herzegovina became independent, there already were signs of rapid disintegration of the moribund centrally controlled economy. This decline was already effecting basic services, such as health and welfare, education, and public utilities. A particular problem was the substantial and increasing urban and rural divide, reflected in economic and social indicators.

Tables 3 and 4 provide an overview of national income trends (in absolute numbers) over the past decade. The 1998 data show a national income level still substantially below the 1991 levels. In the aftermath of war, today's economic development is reflected in low production levels, accounting for less than a third of the prewar levels. Recovery of GDP has been slow, with a notable difference between entities. This disparity is reflected in further disparities, such as that between average salaries in both entities. This difference may be related to a higher share of voluntary donations in the Federation, which triggered foreign investments and domestic productivity. Unemployment is high, with perhaps up to 75% in Republika Srpska and up to 60% in the Federation (according to unofficial estimates), leaving a large number of people dependent on social welfare. However, a substantial amount of *grey* economy is evident.

Table 4. Bosnia and Herzegovina GDP (in billion KM^a) trends in absolute terms, 1991-1998

	1991	1995	1996	1997	1998
Bosnia and Herzegovina	13.05	2.87	4.19	5.80	6.90
Federation of Bosnia and Herzegovina	–	1.96	3.05	4.19	4.96
Republika Srpska	–	0.91	1.14	1.61	1.94

Source: United Nations Human Development Report, 1998.

Note: ^aThe convertible mark (KM) was introduced in 1999 and was initially tied to the German deutsche Mark (DM). As of 1 January 2002, the convertible mark was tied to the EURO (€). For every KM in circulation there is €0.51 deposited in the Central Bank.

Table 5. Macroeconomic indicators, 2001

Indicator	2001
GDP (in US \$PPP ^a)	7 billion (1999 estimate)
GDP real growth rate (in %)	6 (estimate)
GDP per capita (in US \$PPP)	1800 (estimate)
Unemployment rate (in %)	40 (2001 estimate)
Exports (in US \$billion)	1.1 (estimate)

Source: Central Intelligence Factsheet. Washington, DC, US Central Intelligence Agency, 2002.

Note: ^a PPP: purchasing power parity.

Five years after the signing of the Dayton Agreement, the economy and (with it) the entire society has shown some improvement. A joint monetary system and taxation and customs systems were established, and commerce and other types of informal economic exchange were initiated. The convertible mark (KM) was introduced in 1999 and was initially tied to the German Deutsche Mark (DM). As of 1 January 2002, the KM was tied to the Euro (€). The Central Bank cannot print money, which has been an effective inflation control mechanism; for every KM in circulation there is €0.51 deposited in the Central Bank.

It is believed, however, that there is a long way to go before the economy recovers and is self-sufficient. Unemployment and the slow revival of the economy remain the crucial challenges for both local governments and the international community.

Historical background

Historically, health care services were not publicly organized in what is now Bosnia and Herzegovina before 1879, when the Austro-Hungarian administration gradually initiated the development of a health care system similar to that of the other countries within the borders of its empire. A department of

medicine was established within the Government of Bosnia and Herzegovina, and medical clerks/doctors were first employed to define medical–hygiene measures and to control their implementation. Also, towards the end of the nineteenth century, the first hospitals were established in large and middle-sized towns, followed by the establishment of outpatient surgical centres. In 1903, a law was adopted that regulated vaccination for the prevention of variola (smallpox) and other communicable diseases. The first law introducing health insurance was enacted in 1888 for some selective population groups, and in 1910 compulsory insurance was introduced for all employees.

As in other parts of the former Yugoslavia, the public health care system was further developed after 1918, when the first Kingdom of Yugoslavia was established. The first health ministry was established in 1920; some of its mandates were as follows:

- to take care of healthy children and their further proper development
- to take care of population health
- to build institutions for the prevention and treatment of diseases
- to carry on epidemiological surveillance
- to educate the population on health issues.

Some 92 health laws and related documents were adopted from 1918 to 1932.

Area, district and (later on) regional hospitals were established between 1920 and 1928 in all bigger towns; polyclinics/outpatient institutions were also established. These institutions usually contained a department of mother-and-child care and a department for communicable diseases.

In 1929, “departments of hygiene” were established, becoming key actors in the social–medical approach to population health care. All territorially defined health institutions, except hospitals, were subordinated to the health department, and a chamber of doctors was established in each department. Departments of hygiene were established in Banja Luka in 1929, and in Mostar and Sarajevo after the Second World War. A law regulating the functions and duties of medical doctors was also adopted, whereby in Article 22 it was written that:

Doctors are obliged to:

- use their knowledge, qualification and devoted work in order to prevent [disease] and promote population’s health;
- treat and provide advice for people seeking help;
- protect and take care of personal pride, honour of his/her profession, reputation and independence of doctor’s class;
- fulfil his/her doctor’s duties in compliance with scientific achievements.

After the Second World War, and in accordance with the socialist ideology that ruled the country (the former Yugoslavia adopted so-called “self-management”), professional–expert teams lost their influence on decision-making to Communist Party officials. Needless to say, at that time health management was not yet developed as a proper discipline of its own, so system organization took place on centralized command and through control methods. A 1946 law provided social insurance for workers, extending such rights to children in 1950. In the period from 1946 to 1961, following the lobbying of various interest groups, health institutions grew rapidly around the so-called *Dom zdravljas* (“homes of people’s health”), and the number of health care employees grew equally fast. There was, however, no coherent planning – either according to needs or according to capital development. Most public health activities (including pharmaceutical quality control, radiation protection, health economics and health statistics, and informatics) were organized around the Institute of Public Health in Sarajevo.

The period 1961–1971 (characterized in Bosnia and Herzegovina by industrialization, urbanization and changes in the social structure of the population, with large migration from rural to urban areas) brought a substantial growth of specialization and specialized medical facilities in the health field. An expansion of local health administration, regional and sub-regional centres, and the creation of local health centres also took place. The health system was financed through institutions called “self-managed community of interest”, which provided health service insurance, social security and disability insurance to employees and their families. The health system was financed by employees and employers through compulsory contributions and, to a smaller degree, by pensions and other personal incomes, as well as Bosnia and Herzegovina municipal funds. In 1970, a new law on “health insurance” and “mandatory protection of health” was passed; it covered comprehensive and free health protection for vulnerable populations, such as pregnant women, children and adolescents, as well as specific diseases and conditions (such as infectious diseases, diabetes mellitus and cancer).

Based on rising incomes, living standards also increased – in the form of increased literacy and a more comprehensive health safety net. All this was reflected in remarkable advances in population health indicators (decreased infant and general mortality rates for the population, and decreased damage from infectious diseases). From 1972 to 1990, five health system laws were passed, and the health system saw unplanned increases in the number of health personnel and in hospital capacity. Little by little, health care entitlements were extended beyond the growth of capital investment in the system, giving

rise to tensions that would later become evident. At the end of the 1980s negative developments in business and the economy started to affect progress in health – in the form of a flattening of the previous improvements in such fields as infant mortality.

When Bosnia and Herzegovina became independent in 1992, risk sharing occurred at the republic level – through the existing compulsory insurance – until the war started.

During the war, the standard of health care was reduced to a minimum, and major public health and hygiene programmes (such as garbage collection, pest control, disinfections, hygiene control, and control of the import and export of drugs) were completely disrupted. Immunization programmes continued to function with coverage at a fairly high level (thanks to dedicated public health workers), as evidenced by cluster sampling surveys.⁶ Emergency care facilities were set up to treat people injured and requiring hospital treatment. Sanitary units organized themselves to offer medical services in the front lines, under very difficult conditions and with a severe lack of equipment and medicine. In 1992, some 23 special hospitals were formed inside the territory of Bosnia and Herzegovina to provide care to the civilian population and to soldiers.

Government statistics indicate that about 30% of health facilities were destroyed or heavily damaged during the war. Of the 80 emergency clinics before 1992, Bosnia and Herzegovina had only 46 left after the war. In addition, one general and one regional hospital became completely incapacitated. Although many local services continued to operate, the social protection infrastructure also suffered heavily. Around 30% of practising health professionals were lost, due to either migration or war casualties. The war also had a large effect on the education of health care personnel; for example, in order to deter professionals from leaving during the war, a decree from Republika Srpska Ministry of Health halted all forms of further medical education abroad. This deterrent to pursuing medical education was coupled with a lack of movement inside the country of people and skilled professionals.

During the war, insurance contributions per person dropped substantially. Health personnel were paid only marginal salaries or received no salaries.

According to the Dayton Agreement, which broke down the country's health system into two separate systems, health care organization, finance, and delivery would be the sole responsibility of each entity. After the signing of the Agreement, the entities approved their separate health legislations as health

⁶ PURVACIC, Z., ET AL. Vaccination coverage in Bosnia and Herzegovina during the 1992–1995 war. *Croatian Medical Journal*, 38(2).

laws. Created in 2000, Brčko District, with an estimated population of 90 000,⁷ has its own obligation to organize, finance and deliver health care services – as expressed in the Law on Health Care of the Brčko District of Bosnia and Herzegovina.

⁷ According to the Office of the High Representative, the last census was held in 1991 and recorded 90 000 inhabitants (http://www.ohr.int/ohr-offices/brcko/gen-info/default.asp?content_id=6139) (downloaded 1 June 2002).

Organizational structure and management

Health care finance, management, organization and provision in Bosnia and Herzegovina are the responsibility of each entity, while Brčko District runs a health care system over which neither entity has authority. Bosnia and Herzegovina, therefore, has 13 ministries of health and health systems for its 3.6–3.9 million population: one for Republika Srpska, one for Brčko District, one for the Federation level and ten cantonal ministries in the Federation of Bosnia and Herzegovina (one for each canton). In brief, the different organizational structures of each entity plus Brčko District are as follows:

In Republika Srpska, authority over the health system is centralized, with planning, regulation and management functions held by the Ministry of Health and Social Welfare in Banja Luka.

- In the Federation of Bosnia and Herzegovina, health system administration is decentralized, with each of the ten cantonal administrations having responsibility for the provision of primary and secondary health care through its own ministry. The central Ministry of Health of the Federation of Bosnia and Herzegovina, located in Sarajevo, coordinates cantonal health administrations at the Federation level. This feature will have obvious functional repercussions in terms of transaction costs, coordination of decision-making at the entity level, and other matters not faced by Republika Srpska.
- The district of Brčko provides primary and secondary care to its citizens. Because of the small size of its population, the above-mentioned Agreement on Brčko⁸ states:

⁸ *Agreement on the implementation of the entity obligations from the final arbitral award for Brčko on health care and health insurance*. Sarajevo, OHR, 1999.

1. that each entity is obliged to pay health care contributions for pensioners, war veterans, invalids, displaced persons, and others not otherwise insured in the Brčko District (for example, members of each entity who receive medical treatment in Brčko); and
2. that entities will also contribute according to each entity's practice for those unemployed until unemployment bureaus are taken over by the Brčko District itself.

It is essential to understand that there is no national mandate for health care financing and provision. This circumstance requires that several areas of the characteristics of each health system be described separately in the HiT. In many circumstances, the governmental bodies and health systems coordinating roles discussed in the Federation of Bosnia and Herzegovina will be described as cantonal (that is, describing the 10 cantons within the Federation) or will be described as either Federation level or Federal level. The term Federal in this document will, therefore, not describe a national function (involving both Federation of Bosnia and Herzegovina and Republika Srpska entities), but will describe only the Federation of Bosnia and Herzegovina entity level. The Brčko District will not be further discussed in this document.

Organizational structure of the health care system

Beyond the above-mentioned entity-related split, it is worth mentioning that the basic outline of the health care delivery system in Bosnia and Herzegovina has not changed significantly from the way it was before the war. This is illustrated in Fig. 3, Fig. 4 and Fig. 5 and their subsequent descriptions.

The above-mentioned similarity between postwar and prewar health systems occurs in spite of a process of reform, decentralization and recentralization that began as a part of the Dayton Agreement. Despite a number of reform proposals, a plethora of working groups, laws, and drafts of laws, health care delivery remains essentially unchanged as compared with the system that the country inherited when it became independent (see also the chapter on Health care reforms).

The concept of decentralization and recentralization is fundamental to understanding the health system of Bosnia and Herzegovina. As previously discussed, before the breakup of the former Yugoslavia, the health system was “centralized” at the level of the Republic of Bosnia and Herzegovina. As a result of the war and the subsequent Dayton Agreement, Bosnia and Herzegovina was divided into two entities, each responsible for administering its own health

Fig. 3. Organizational structure of the health care system in the Federation of Bosnia and Herzegovina *

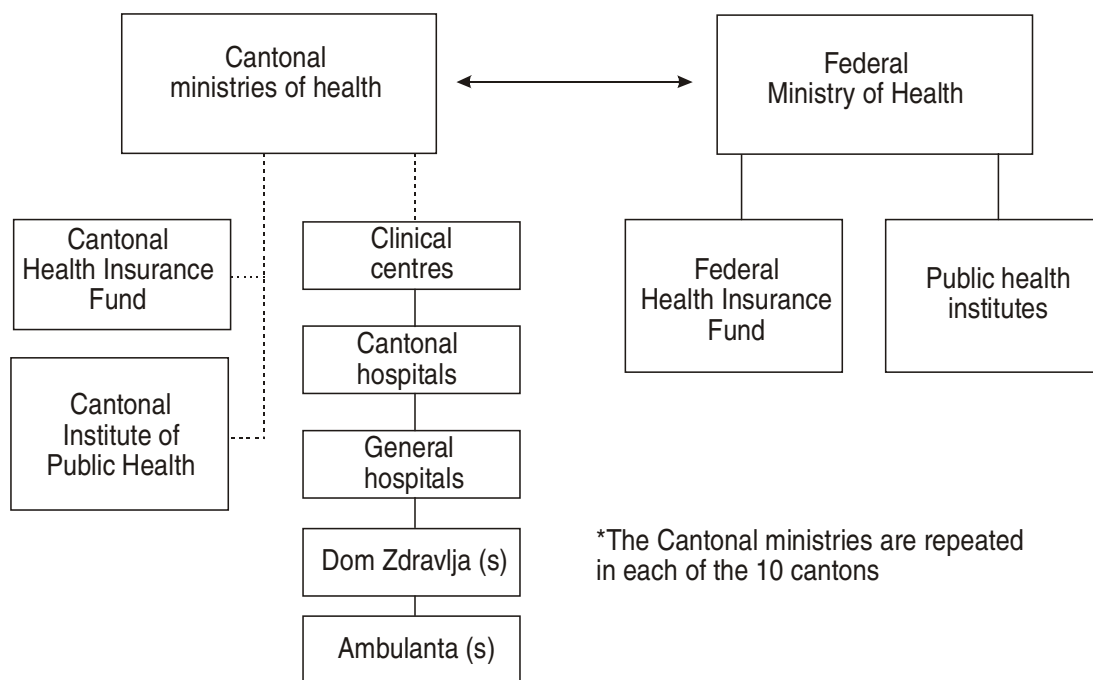


Fig. 4. Organizational structure of the health care system in Republika Srpska

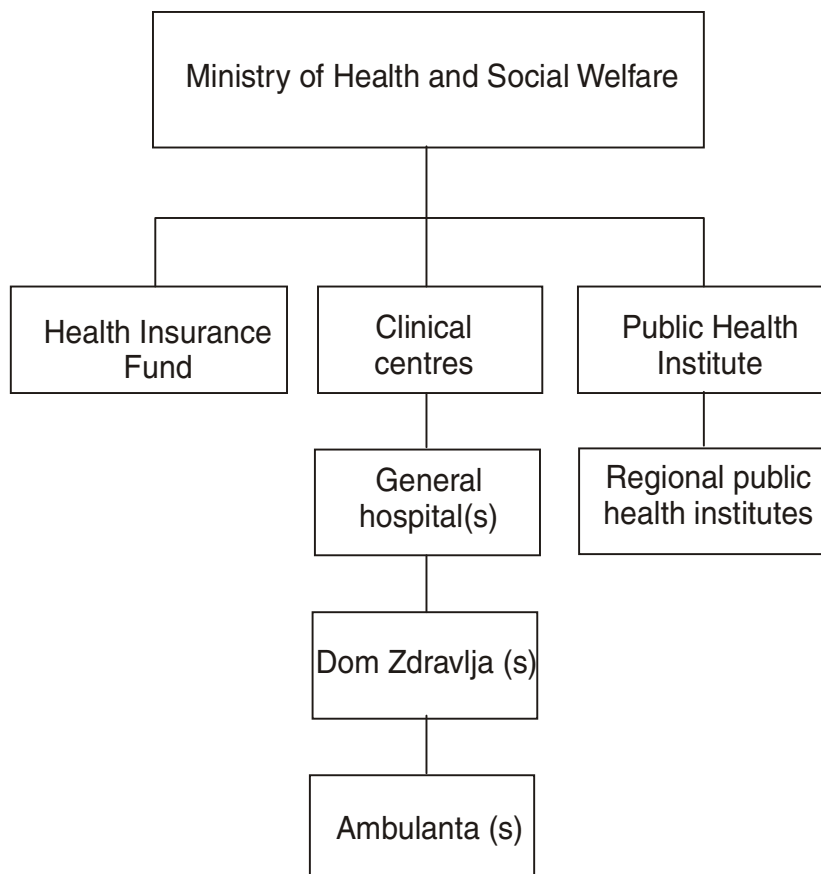
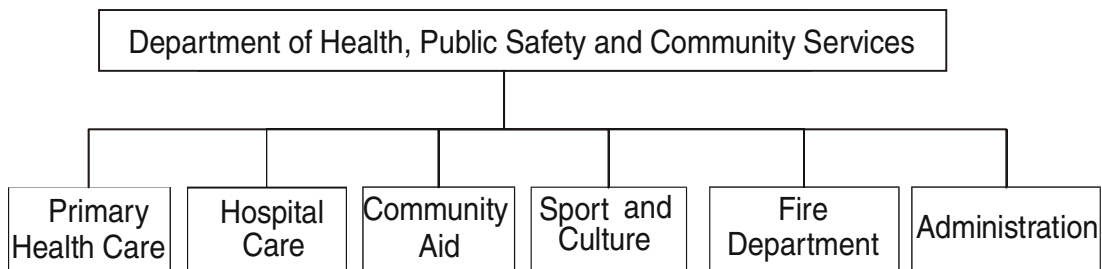


Fig. 5. Organizational structure of health care in the Brčko District administration

system. Whereas Republika Srpska opted for a centralized health system, with one ministry of health overseeing the health system, the Federation of Bosnia and Herzegovina opted for a decentralized cantonal system, with each canton responsible for its health care administration and financing. As the Federation of Bosnia and Herzegovina opted for the decentralized cantonal model of health system administration, the “federal” level was given a limited and non-coercive role that ensures compliance with entity-legislated policies.

In fact, Bosnia Herzegovina is a case study of premature decentralization. The prewar health institutions, unready for change, remain functioning as in the prewar environment while newly created facilities lack the capacity to operate efficiently. From a health system point of view, the division of Bosnia division has created a number of problems. First, inter-entity coordination in matters of the health system have been poor because of the lack of formal legislated mechanisms. Second, within the Federation of Bosnia and Herzegovina, the cantons do not officially collaborate with each other.

There are some exceptions to this, as recent legislation has called for minimal cost sharing across the Federation of Bosnia and Herzegovina cantons to be redistributed by the federal health insurance fund for tertiary care. With the establishment of Federal Solidarity in January 2002, there is a strong hope that equity issues will be addressed more broadly and that over time inter-cantonal cooperation will be increased. Another exception is the December 2001 legislation that outlines an agreement to share, among other things, patient load; this plan, however, has yet to be operationalized. Prior to these legislative initiatives, the only cross-cantonal cooperation occurring was between Croat cantons, through merging health insurance funds to increase their risk pool. Although this probably increased allocative efficiency, it was a politically sensitive issue, not consistent with the principles of the Dayton Agreement.

A third problem resulted from the decentralization that accompanied the creation of borders. Specifically, the geographical distribution of hospitals in the entities and cantons has not been optimal for equitable access to health services.

A fourth problem resulted from the abruptness of decentralization. There was no smooth transitional period in which to develop adequate skills and capacity to undertake the difficult and complex decentralization process. Institutions, therefore, continued (or tried to continue) performing the same function as before the war (without reorganizing) even though the administrative structure and manner of governing had changed dramatically. This fragmentation created incentives to duplicate services in each entity and canton. Unfortunately, the lack of technical capacity was often confused with lack of political will.

As each entity's health system is autonomous from the other, the following section will provide detail on the individual entities. The rest of the document will follow this format, providing an overview of the topic for the national level, followed by descriptions for the entity level.

Federation of Bosnia and Herzegovina

Ministry of Health

The Federation has 11 ministries of health: one at the Federation level and one in each of the ten cantons. The Federation level officials/organizations have virtually no authority over the ten cantonal operations. By law, responsibility vested in the Federation level for health matters is limited to functions that cannot be executed at the cantonal level such as border/customs inspections and operations, and legislation development. By law, the authority over health sector operations resides with the cantonal authorities, including service delivery, revenue/insurance collections, expenditures, policy, planning, etc., each canton operates its own health insurance fund, its own health care facilities including hospitals, Dom Zdravljas (health centres), and ambulantas (health posts). Although the cantonal ministries are autonomous and are health insurance fund budget holders (whereas the Federation level is not), they often have limited budgets, have limited capacity (because of small staff of only one or two members), and represent small populations, giving them limited leverage to exercise real control over their cantonal health systems. Also, although the Federal ministry has an advisory and regulatory function over the cantonal level ministries, its authority to enforce its control is questionable. This is illustrated by the split of the health insurance fund in the Mostar canton into two funds, despite the ministry's mandate that each canton can only have one health insurance fund.

The ministry of health functions at the Federation level are defined as follows:

- health policy development for the Federation of Bosnia and Herzegovina;
- monitoring and evaluation of the population's health;
- planning of medical facilities, including capacity building of institutions;
- development and regulation of compulsory insurance; and
- regulation of the public health safety network and supervision of health inspections, by itself or through other agencies (for example, through the Federal Bureau for Protection from Radiation and Radiation Safety).

The stated duties of the Federal ministry of health also include supervising health institutions, although this function has not been put into practice and is exercised by the cantonal ministries. Also, the ministry appoints health insurance institute managing board members and the directors of health service delivery institutions.

Health ministries at the cantonal level are in charge of creating health legislation for the canton, advising on technical matters and implementing regulations. Their work is focused on the cantonal hospitals, health centres, *ambulant*s (dispersed outpatient health stations that are field stations of the primary care medical centres called *Dom zdravljas*) and other cantonal health institutions. The cantonal ministries are also responsible for electing members to the managing board of health institutions located at the Federation of Bosnia and Herzegovina entity level.

Ministry of Finance

The Ministry of Finance receives its share of the state income from taxes and international donations, a fraction of which is transferred to the ministry of health. Payments to health insurance funds are made directly from companies, thus bypassing the ministry as an intermediary. In some cantons immediately after the war, the cantonal Ministry of Finance collected and transferred funds to the health insurance funds. At present, direct payments are made to the health insurance funds.

Ministry of Education

The Ministry of Education (together with the Ministry of Health) determines the criteria to be used for health legislation related to education in general and for health personnel in particular. The Federation of Bosnia and Herzegovina Ministry of Education annually determines the number of students to be enrolled in undergraduate study, including admission to the three Federation of Bosnia and Herzegovina Medical Schools, in Mostar, Sarajevo and Tuzla. There is no linkage, however, for human resource planning between the ministries of

education and health, and there is no significant input from the ministry of health on curriculum design for medical schools.

The Federation Ministry of Health is currently approving specialist courses upon recommendation or requests from cantons and can thereby influence the number of specialists. The Ministry, however, has neither a department of human resources nor an explicit policy on such a department. It must be added here that the division between the Ministries of Education and Health impacts the overall human resource planning and capacity building of the Federation of Bosnia and Herzegovina health system.

Health insurance institutions

Health care is mainly financed by funds coming from a health insurance scheme within the ten cantonal health insurance funds and one Federal Health Insurance Fund. Credits from development banks and occasional international donations, as well as money from the Federal (Federation entity level) public budget, continue to play a role in the Federation of Bosnia and Herzegovina, however.

The Federal Health Insurance Fund is mandated to control and supervise the 11 compulsory insurance funds. It is also in charge of implementing conventions, international agreements and laws, and in providing reinsurance.

Each cantonal government appoints members to its canton's Health Insurance Institute and managing board. The roles of these governments are to either fix local contribution rates or develop recommendations for cantonal parliamentary approval and to record and report payments and expenditures of the health insurance fund to the Federal and cantonal levels.

As discussed in the introduction to this section, Federal Solidarity was established in January 2002, which will reduce the duplication of services and enable movement of patients from one location to another to receive needed services where available. This will reduce the fragmentation of services between cantons and along ethnic lines. In practical terms, it means that lower income cantons can now equally benefit from expensive interventions that before Solidarity could not be afforded. This has eliminated justification for ethnic-based risk pooling. As a result, on 15 January 2002, the Croat Inter-cantonal Health Insurance Fund ceased to exist. Contributions are now paid into one single account per canton. In addition to a percentage from contributions for cantonal health insurance funds for the Federal Solidarity (8%), by a decision from parliament, this amount will be matched from general revenues. This will resolve the problem of lack of contributions by non-earners (pensioners, the unemployed, social cases, etc.) and also present an opportunity for the equalization of health expenditures across the Federation.

Professional chambers

All health professionals are required by law to be members of their related chambers: the Physicians Chamber, the Pharmaceutical Chamber, the Medical Biochemistry Chamber, and the Chamber of Health Technicians. Chambers are based at the cantonal level. In some cases, chambers have included multiple cantons to promote cooperation between cantons. The scope of work of these cantonal health professional chambers formally includes:

- monitoring adherence to professional and ethical standards;
- advising the Minister of Health on issuing, extending and withdrawing the licences of private practitioners;
- representing the interests of members in negotiations with insurance funds;
- assisting citizens in realizing rights related to quality, content and type of health care services;
- providing professional opinion on the pricing of health care services;
- licensing health care professionals;
- participating in the determination of standards and norms in health care;
- providing continuing education of health care professionals; and
- advising on regulations related to professional development.

It is believed that these professional organizations are not currently meeting the enrolment levels set by law.

Professional associations

As before the war, all health professionals may join a professional association in order to protect and develop their professional interests. Up to now, medical associations have been established in the Sarajevo and Tuzla cantons. An association for pharmacists was established at the Federation level. At present, only Bosniak majority cantons have joined the Federation level pharmacy association, as Croat-majority cantons have established their own pharmaceutical association. An association for dentists is under development in Sarajevo canton.

Health professional unions

Health professional unions are voluntary nongovernmental organizations (NGOs), usually formed in specific medical branches in order to advance and promote the interests of employees in specific health sectors. These unions are generally focused on increasing salary levels, improving working conditions and increasing workers rights. The most visible activities of these unions over the past few years have been union organized strikes.

Health institutions

The Federation of Bosnia and Herzegovina Law on Health Protection stipulates the following types of service delivery institutions:

- primary care: medical centres called *Dom zdravljas*, outreach outpatient clinics (*podrucna ambulantas*), home care institution (*ustanova za zdravstvenu njegu u kuci*) and pharmacies (*apoteka*); and
- specialist/consultative and hospital health care: polyclinics (*poliklinika*), hospitals (*bolnica*), spa/rehabilitation centres (*ljeciliste*) and institutes (*zavod*).

Health institutions are owned by municipal governments, cantons and the Federation and are organized at Federation, cantonal and municipal levels. The most important health institutions in the Federation of Bosnia and Herzegovina are: the “Clinical Centres” (in essence, university hospitals), the Public Health Institute of the Federation of Bosnia and Herzegovina, the Institute for Transfusion Medicine, the Institute for Drug Quality Control and the Federal Health Council of the Ministry of Health. At the cantonal level, there are:

- cantonal hospitals
- public health institutes
- institutes for transfusion medicine
- institutes for occupational medicine and institutes for sport medicine.

The last two are not established yet in most cantons.

Republika Srpska

Ministry of Health and Social Welfare

Republika Srpska Ministry of Health and Social Welfare is centralized with regard to administrative, regulatory and fiscal responsibilities. The ministry regulates the following entity-wide functions:

- disease prevention and health promotion
- monitoring of health status and needs of the population
- health care organization
- professional training and specialization of health professionals
- health inspection
- supervision and audit on health institution and professional performance
- health insurance and health care finance from public revenues

- production and distribution of medicines, poisons and narcotics, as well as medical equipment and aid devices
- control of alimentary articles and general use products; and
- sanitary inspection.

The ministry also supervises and administers the social insurance and social care system, which includes pension and disability insurance for all occupations; social care of family and children; and activities of social organizations and associations.

Ministry of Finance

Beside its overall entity-wide fiscal monitoring function, the Ministry of Finance is legally obligated to cover the health insurance costs for the following groups of citizens:

- veterans, military war invalids and the families of fallen soldiers;
- redundant employees, still receiving compensation in accordance with the labour;
- unemployed people, with secondary and higher education, registered with the Republic Bureau of Employment;
- mature students, while registered with the Republic Bureau of Employment;
- retired persons;
- those in regular receipt of financial assistance (social cases) or the institutionalized, when not otherwise insured; and
- refugees and displaced persons, when not otherwise insured.

There are, however, no exact data on the number of the people belonging to the above groups, for whom the health insurance fund should receive (according to internal estimates) a monthly lump sum of approximately KM 2.3 million. For example, in the first 9 months of 2001, the Ministry of Finance donated KM 7 million to the Health Insurance Fund.

Ministry of Education

The Ministry of Education has no legal obligation to consult the Ministry of Health on the number of medical students enrolled in Republika Srpska's Medical School in Banja Luka. The Ministry of Health, however, does approve the university's curriculum, grant requests for physician specialization training and determine the number and type of specialists working in Republika Srpska.

Health insurance institutions

The only body legally responsible for the collection and allocation of financial contributions to health care providers in Republika Srpska is the Health Insurance Fund. This single Fund operates on the basis of solidarity and mutuality. The Health Insurance Fund Assembly, elected by the contribution payers, governs the fund. The general director is nominated by the Health Insurance Fund Assembly and is appointed by the Government of Republika Srpska. The Ministry of Health and the fiscal police supervise the functioning of the Fund.

Republika Srpska's Health Insurance Fund consists of 8 regional offices and 54 branch offices with a high level of centralization. Regional offices are, however, partly autonomous, since they operate with around 80% of the income collected in the territory they cover; on the other hand, branch offices have no autonomy in decision-making.

The central office of the Fund is responsible for the overall corporate strategy. It sets prices and also defines contracts, internal audits, distribution of solidarity and risk funds, and some centralized procurements. Regional offices are responsible for the signing and monitoring of contracts, distribution of payments to providers, and collection of contributions within each region. Finally, branch offices are responsible for providing support to their regional offices in monitoring processes, such as registering members and ensuring entitlements.

Professional chambers

The Medical Chamber is an independent professional organization of medical doctors, dentists and pharmacists in Republika Srpska. All practising health professionals are required by law to be members of their respective chamber. The chamber's scope of work formally includes the following:

- issuing licences for health professionals;
- checking the level of knowledge and competence of health professionals;
- maintaining health professionals registers;
- monitoring adherence to professional and ethical standards;
- cooperating with Ministry of Health, Health Insurance Fund and professional associations;
- providing professional opinions on specialization training, professional examinations, number of students to be enrolled for postgraduate studies, networks of health institutions, laws and other regulations that relate to health care services;

- participating in the determination of health care standards and norms;
- providing continuous education of health care professionals;
- participating in the preparation of regulation related to professional development; and
- protecting professional and other interests of its members.

Professional associations

The Medical Doctors Association is an NGO spanning the entire territory of Republika Srpska and is comprised of professional medical doctors. Each member joins the association that corresponds to their professional specialization.

Health professional unions

Health professional unions are voluntary NGOs, formed in order to advance and promote the interest of the employees in the health sector. These interests include salary levels, working conditions and other work-related rights. Medical doctors, nurses and other health employees are members of the unions. Several strikes have been organized by the unions in the past few years.

Health institutions

Municipal governments own the health institutions that operate in Republika Srpska. According to Article 22 of the Law on Health Care, health institutions comprise two Clinical Centres (university hospitals), one central Public Health Institute, and some specialized institutes and centres or clinics (for example, rehabilitation centres and the Blood Transfusion Centre). Besides regional hospitals, there are also branches of the public health institute at the regional level.

General hospitals and pharmacies are located at the municipal level, and each municipality has its own health centre. There are also numerous dispersed *ambulant*s, which are field branches of *Dom zdravlja*s (their functions are further explained below)

All hospitals in Republika Srpska are public, except one with approximately 50 hospital beds and is currently contracting with the Health Insurance Fund. There are also private specialist *ambulant*s that are not funded from public revenues and that operate either full-time or part-time (identified as institutions with “additional operation hours”). The private hospital and private *ambulant*s are profit-making institutions.

Planning, regulation and management

Bosnia and Herzegovina's health system(s) inherited a particularly formal and rigid health facility and human resource planning method. Most health institutions have planning criteria in place; for example, the distribution of family medicine *ambulant*s is determined by a legal act adopted by the city or municipal assembly. Experience, however, shows that in some areas planning is more a fiction than a reality: work with authorities suffers from a slow and unresponsive inherited culture, from an inability to transform policies and laws into effective action, from a lack of evidence-based policy-making, from an inability to create and sustain sound policies, and from little transparent decision-making. A recent UNHCR document reported that complicated, expensive, ineffective and inefficient administration reflects the poor state of public administration in Bosnia and Herzegovina as a whole. "The war eroded the integrity of public institutions and the rule of law; weak new institutions and political environment fragmented by ethnic divisions leaves space for corruption and rent-seeking".⁹

The lack of power to enforce legislation is also a problem as well as the lack of power to collect health insurance contributions. Also, the postwar administrations have found it especially hard to manage institutions. Directors and managers of health care institutions; as a result, health institutions in Bosnia and Herzegovina are generally "administered" and "unmanaged".

Finally, the issue of decentralization is extremely important, especially in the Federation of Bosnia and Herzegovina. In addition to the Bosnia and Herzegovina Constitution/Dayton Agreement (by which health care is the sole responsibility of each entity and not of the Bosnia and Herzegovina government), the Constitution of the Federation of Bosnia and Herzegovina considers health care to be a divided jurisdiction between Federal and cantonal authorities, so that health care can be "enforced jointly or separately, or by each canton coordinated with the Federal authorities". After some debate, it was accepted that health care be organized at the cantonal level and coordinated at the Federal level. The autonomy of cantons in health care provision was thought to facilitate the response of health services provision to community needs, according to demographic, social and epidemiological profiles. This division, however, seems to be raising insurmountable operational difficulties. This may be due to, among other things, lack of regulatory and supervisory control and insufficient operational capacities at the cantonal level.

⁹ THE WORLD BANK GROUP FOR BOSNIA AND HERZEGOVINA. *Memorandum of the President of the International Development Association to the executive directors on a country assistance strategy*. Sarajevo, The World Bank Group for Bosnia and Herzegovina, 2000.

Federation of Bosnia and Herzegovina

Planning

As a result of the inherited input-based planning system, health care facilities are unevenly distributed in favour of urban facilities and overspecialized health professionals. Planning is influenced by political lobbies, ethnic divisions (for example, two hospitals in Mostar and a new Croatian hospital in Nova Facilities for the treatment of cardiovascular diseases are an example of this. Although cardiovascular diseases are the leading cause of morbidity and mortality in the Federation of Bosnia and Herzegovina, there is no serious prevention programme in place; instead, there are two expensive, high-technology cardio-surgery centres in Sarajevo and Tuzla, 120 km apart from each other. This is an excellent example of over supply of specialized care in the system; despite the availability of tertiary care, most people are not satisfied with or have no access to primary health care.

Regulation

According to the law on health care, cantons are allowed to produce their own regulations, which would be integrated later at the Federal level. In practice, most of the regulations have been produced by the Federation (entity level) Ministry of Health – specifically, its legal department, which is responsible for issuing regulatory proposals that stipulate details on the areas of concern. The legal framework of the health care system in the Federation of Bosnia and Herzegovina is stipulated in two main laws: the Law on Health Protection and the Law on Health Insurance.

The list of Federation regulatory acts relevant to public health (see below for health system reform legislation) includes the following:

- Order on Compulsory Immunization (issued on an annual basis);
- Law on Protection from Ionizing Radiation and Radiation Safety (*Official Gazette of the Republic of Bosnia and Herzegovina*, 15/1/99);
- Law on Trade of Medicaments (*Official Gazette of the Republic of Bosnia and Herzegovina*, 2/92);
- Law on Production and Trade of the Narcotics (*Official Gazette of the Republic of Bosnia and Herzegovina*, 2/92);
- Law on Trade of Poisons (*Official Gazette of the Republic of Bosnia and Herzegovina*, 2/92);
- Law on Transportation of Dangerous Substances (*Official Gazette of the Republic of Bosnia and Herzegovina*, 2/92);

- Law on Sanitary Proprieties of the Victuals and Objects of General Use (*Official Gazette of the Republic of Bosnia and Herzegovina*, 2/92);
- Law on Protection of Population from Infectious Diseases Endangering Entire Country (*Official Gazette of the Republic of Bosnia and Herzegovina*, No. 2/92);
- Law on Sanitary Inspection (*Official Gazette of the Republic of Bosnia and Herzegovina*, 2/92);
- Law on Displaced–Expelled Persons and Refugees–Returnees in the Federation of Bosnia and Herzegovina (*Official Gazette of the Republic of Bosnia and Herzegovina*, 9/00); and
- Law on Tobacco and Use of Tobacco Products (1/97).

Management

The practices of health care institutions in the Republic of Bosnia and Herzegovina are more hierarchical/administrative than they are in industrialized countries. Each health centre, hospital and health care institution in the Federation of Bosnia and Herzegovina is led by a director and their deputy, both appointed by a governing council.

A governing council's composition depends on the institution's ownership: all Federation of Bosnia and Herzegovina government-owned institutions have a nine-member council; those owned by one or more cantons have eight members. In both cases, the Federation of Bosnia and Herzegovina government appoints the chairman of the governing council upon proposal from the Minister of Health. Single canton- or municipality-owned institutions have a council with five members, the chairman of which is appointed by the respective cantonal government. Physicians appointed to be directors of specialist institutions must be specialists in the same field of medicine. These positions do not require formal management training. A director of a teaching hospital must be a member of the teaching staff at a university. Directors appoint the members of the so-called council of experts; these members are commonly heads of departments in their respective institution and are entitled to make proposals and decisions in its professional realm, as well as to oversee professional conduct.

Decentralization

As discussed in the introduction to this section, following the Dayton Agreement, funding and regulation responsibilities were transferred to the cantonal authorities, with the exception of public health services and quality control of medicines and of blood products. In 1996, the Law on Health

Insurance established ten cantonal Health Insurance Funds. Because cantonal decision-making is so autonomous, the system is fragmented; also, risk pooling between cantonal funds is, with one exception, nonexistent. Moreover, although the Law on Health Insurance allows merging two or more cantonal funds, there are concerns that funds could be merged *only* along ethnic lines, such as in the Croat cantons in Herzegovina, thus further increasing inequity in access. This further weakens income generation at the Federation level – already difficult due to high unemployment rates and a large informal sector. Though authorities have pledged broad-based privatization in the Federation, no follow-up has occurred. In reality, many physicians operate private practices or perform private services in the afternoon or even in hospitals where they work.

Republika Srpska

Planning

The plan for a network of health care institutions is meant to define the type, number, structure and distribution of health institutions established by the government, city and municipal authorities. The foreseen different types of health institutions are listed in Article 22 of the Law on Health Care. The government passed this legislation in November 2000. Although the legislation came into effect in January 2001, it has still not been fully implemented.

The Law on Health Care recommends that a primary care institution should be accessible within an 8-km radius of each household and that each family medicine team should serve a maximum of 2000 inhabitants. Similar criteria exist for pharmacies; in that each should serve a minimum of 5000 inhabitants and that the distance to the furthest household does not exceed 10 km. The hospital map is currently being discussed in detail.

Regulation

The ministerial department for health inspection is formally responsible for sanitary inspection – mainly inspection and certification of imported food; pharmaceutical inspection and examination of premises (physical, human and technical) necessary for licensing; and inspection of public and private medical facilities. The implementation of such functions is rather weak, however.

Plans for improving regulatory functions include setting up a drug agency for drug registration and accreditation; developing legislation to regulate capital investments; initiating registration and licensing of health personnel following the adoption of the Law on Medical Chambers; and establishing an accreditation agency for both public and private hospitals. The responsibility of such an

agency would be to accredit medical settings according to developed standards and clinical protocols.

The Republika Srpska's Health Insurance Fund has recently established the above-mentioned Health Insurance Fund Assembly, in order to complete the Law on Health Insurance, regarding control over the following: revenue collection, levels of contribution, scope of benefits, basic health benefit package, distribution formula, priority setting and development of purchasing strategy, among other things. Improving transparency in decision-making processes and accountability for spending public money are also explicit objectives.

In addition to the above, the Republika Srpska has adopted the same legislation as the Federation of Bosnia and Herzegovina, except for the Law on Tobacco Products and Transportation of Dangerous Substances.

Management

As in the Federation of Bosnia and Herzegovina, a director and deputy director are appointed to lead each health care institution governing council. The composition of each governing council depends on the type of institutional ownership. Institutions owned by the Republika Srpska government are clinical centres, hospitals and specialized institutions, such as rehabilitation centres. For these institutions, the Minister of Health appoints directors, based on the recommendation of the governing council. Institutions owned by municipalities are health centres – *Dom zdravljas*. For this type of institution, the Ministry of Health does not have direct control over the “managerial” function (the Minister of Health can only issue an agreement on appointment, which is formal and not binding). It is the municipality that appoints the governing council, and the council appoints the director.

Directors of provider institutions find it difficult to manage human resources for several reasons – for example, lack of managerial training and skills, and rigid legal arrangements – thus risking low cost-effectiveness, low workforce moral and generally low quality of services in the public sector.

Decentralization

Republika Srpska manages health institutions at both the entity level and municipal level. As pointed out previously, the entity government controls hospitals and clinical centres while the *Dom zdravljas* are under municipal authority.

The autonomy of the *Dom zdravljas*, a legacy of the socialist system before the war, means that the Ministry has little direct influence on the management policy at the level of the *Dom zdravlja*. Many observers see this as delaying the

implementation of health sector reform. The Ministry is considering amending the Law on Health Care in order to get more control over the primary health care level institutions.

Large-scale decentralization of the pharmaceutical sector through privatization has been undertaken (to be further discussed in the section on “Pharmaceuticals and health care technology assessment”), but no formal equivalent move has taken place in other areas of health care.

Organizational structure and management conclusions

Besides some clear improvements, lingering problems remain throughout Bosnia and Herzegovina under this complex organizational arrangement. Although the system nominally offers coverage to all citizens in Bosnia and Herzegovina, in reality many people are not fully covered and have to pay out-of-pocket when using health care services. Several countrywide problems contribute to this situation.

The first problem is that despite the huge administrative apparatus with 13 health ministries and complex legal divisions, no regulation exists to rule over inter-entity issues in health care utilization. So far, and despite serious efforts, there is still no portability of funds from one location to another – for example, from entity to entity, or from canton to canton within the Federation of Bosnia and Herzegovina. This means that citizens of one entity/canton are left without cost protection when in need of health care in other entity/canton, and thus have to pay the full price for treatments received, all of which raises serious equity concerns.

The second problem is that the design of the health care system makes it difficult to achieve economies of scale and efficient management. Conversely, there is the issue of minimum required size for maximum efficiency. On the other hand, the size of the bureaucracy and the number of competent technical people required to run the system surpasses the current level of economic development, in addition to adding complex coordinating duties to a not well-trained set of managers.

A recent UNHCR document¹⁰ summarizes these two interrelated key problems of system access and efficiency. It specifically points out that there are serious limits in access to health care through a combination of complicated and non-portable insurance schemes, a lack of adequately equipped facilities, and a general lack of funds in the system to properly run the health care system. These issues are further exacerbated by transportation problems, such as

¹⁰ *Health care in Bosnia and Herzegovina in the context of return of refugees and displaced persons.* Geneva, UNHCR, 2001.

distance, rugged geography and a lack of public transport options. Further complicating the undersupply of health care centres is the expansion of patient demand for services, due to postwar trauma, injury or increasingly prevalent chronic disease in the population.

Health care financing and expenditure

Main system of financing and coverage

Before the war, the health system was financed through “nongovernment affiliated” institutions called “self-managed community of interest”. These institutions provided health insurance, social security and disability insurance to employees and their families.

During the war, the practice of payroll taxation was impractical and the Health Insurance Fund virtually stopped working as an institution in the entire country; as a result, health financing was organized through the Ministry of Health. During this period, health insurance contributions only covered a small fraction of expenses; the rest was financed from the state budget, with financial help and assistance in kind from humanitarian aid, donations and out-of-pocket expenditures.

After the war, finance reverted to its prewar collection arrangements, although various exceptions still abound. Many problems exist and are related to the collection of funds in both entities. The main problems are:

- The economy of the country is recovering very slowly, so that the resource base for the public system remains limited.
- Outside the generation of income for health, collection of contributions is difficult, due to a general inability to pay and the inability of the state to establish effective tax enforcement, so that government can barely pay for vulnerable groups.
- The burden of contributions is unevenly spread among population groups, creating inequity in financing. In reality, financing is regressive, because the rate for each group is effectively set by the ability to collect contributions:

farmers (representative of poor groups) and the self-employed (representative of rich groups) pay less than state sector employees, which deepens inequity, whereas the minimum payment threshold affects poorer companies and employees disproportionately. Further complicating tax collection, efficient tax collection for farmers has been difficult to implement due to the low income of farmers and low incentive from the Ministry of Finance to enforce collection.

- Under-the-table payments in the system have not been officially published in Bosnia and Herzegovina, but these payments are assumed to be substantial in both entities. A household study carried out by the Know How Fund revealed that most citizens pay directly to their providers in many publicly-owned service delivery facilities. This amount is estimated to be 4.7% of GDP.
- The above challenges have been recognized by the entity-wide health ministries of Republika Srpska and the Federation of Bosnia and Herzegovina and by international donors, and a number of reform activities are under way to tackle such problems (see also the next chapter on “Health care reforms”). Quoting once more from the UNHCR document:¹¹

The three pension insurance funds recently agreed to provide funds to registered pensioners regardless of their location in Bosnia and Herzegovina. The agreement, however, fails to actually deliver coverage, as pensioners’ pension entitlements can only be paid in the place of pensioners’ registration in Bosnia and Herzegovina. Therefore, in reality, when pensioners require medical treatment outside of their place of residence, they are officially regarded as uninsured.

Equally as complicated, current national legislation provides equal and non-discriminatory health insurance access to displaced persons and repatriates/returnees, as it does for all Bosnia and Herzegovina citizens; yet, in practice, such persons often effectively remain uninsured.

Both entities struggle with similar health financing issues – that is, resolving informal, out-of-pocket payments and tax contribution collection specifically from farmers, private sector employees and the self-employed. In addition, both entities have exemptions for contributions from government-owned companies. A discussion of each entity’s financing system follows.

¹¹ *Health care in Bosnia and Herzegovina in the context of return of refugees and displaced persons.* Geneva, UNHCR, 2001.

Federation of Bosnia and Herzegovina

Fundraising and resource pooling

The current insurance contribution rate is 18% of net salary (14.5% in 1991 and 30% in 1997 – due to the decline in insured persons in relation to the total population). Funds for health care are derived mainly from payroll contributions in addition to a small portion of taxes on other personal income, the canton and municipality budgets, international donations and other sources.

According to the 1997 Law on Health Insurance, insurance is “obligatory in the territory of the Canton” (Article 1). Entitlement to health insurance is for “employees and other persons executing specific activities or having specific characteristics”. Family members of an insured person are subsequently insured. Contribution rates and methods of calculating and paying contributions for compulsory health insurance are determined by the Federal Ministry of Finance and by the Law on Contributions. The cantonal insurance institute can determine their own rates, as legislated by the cantonal legal body, but the rates must be equal or below rates set by the Law on Contributions. The current average contribution rate of 18% of salary consists of 13% paid for by the employee and 5% by the employer.

Every year, each canton is requested to prepare and submit a compulsory insurance scheme financial plan (incomes and expenditures) to its cantonal health minister for approval. In case expenditures exceed the planned incomes, cantonal and municipal budgets would cover the gap. The ten cantonal funds then administer their money and allocate resources to the providers.

Compulsory reinsurance is foreseen to cover catastrophic circumstances. To that end, the funds are expected to be collected as reinsurance contributions by the reinsurance institute, but to be administered and kept within the Federation of Bosnia and Herzegovina Insurance Institute. Cantons may also autonomously introduce the so-called “extended health insurance” in order to extend coverage for services not covered under the entity’s compulsory health insurance system.

Although evidence is only anecdotal, it is widely assumed that there is a substantial practice of underreporting wages, which negatively affects both insurance contributions and fiscal accounts. The shortage of cantonal funds, combined with the uneven population distribution among the cantons, means that the amount of risk pooled is often too small; this is especially true in the case of the Federation of Bosnia.

Republika Srpska

Fund raising and resource pooling

According to the 1999 Law on Health Insurance, compulsory social health insurance is expected to provide coverage for insured people, their family members, and members of their household. The law describes the responsibility of each population group (for example, farmers, employees, employers, the government and public organizations responsible for vulnerable groups) to pay its contribution. An out-of-pocket co-payment has been introduced to supplement social insurance funding.

Contributions are based on payroll; current rates are different for different groups of employees and amount to:¹²

- employees: 15% (7.5% by the employee, 7.5% by the employer) on the net wage (about KM 44 per month);
- self-employed: 15% on the net wage (estimated as KM 34 per month);
- pensioners: 4% on the net pension (estimated as KM 10 per month);
- unemployed: KM 10 per month (paid by the unemployment fund);
- farmers: 16% of the estimated property tax (about KM 4 per month), plus the difference to reach the minimum monthly contribution of KM 20; and
- contributions from the state budget may not be less than the average per person contribution rate from the previous year (estimated as KM 20 per month).

In 1998, around 70% of the population were reported to regularly contribute to the Health Insurance Fund (some 980 000 people, out of which 525 000 were from the state sector, 150 000 were pensioners and 115 000 farmers). The reason for the shortfall is that, although various government ministries are responsible for paying contribution for vulnerable groups, only a portion of the contributions is regularly paid: between 10% and 90% was paid out, depending on the group; overall, 80% was due in the year 2000. Table 6 gives the sources of income for the Republika Srpska Health Insurance Fund.

The Law on Health Insurance allows neither opting out nor *voluntary insurance*,¹³ which is seen as redundant and a possible way of bypassing contributions to the compulsory insurance system. The Law, however, allows a so-called *extended insurance* – in essence, supplementary insurance with extra

¹² *Health insurance fund financial plan for 2001*. Banja Luka, Republika Srpska Health Insurance Fund, 2001.

¹³ By voluntary insurance, local terminology understands the term to mean basic coverage paid by an individual outside the public, compulsory scheme. The term additional insurance is used to explain the right of an individual citizen to increase benefits obtained through and within compulsory insurance.

benefits, including the risk of co-payments. While public insurance is compulsory and carried by the Health Insurance Fund, more competitors may be allowed in the extended insurance market; the regulatory framework, however, has not been completed, and such an insurance market still does not exist.

Table 6. Sources of income (structure) for the Republika Srpska Health Insurance Fund (in %)

Sources	1998	1999 ^a
State sector	82.2	81.4
Private sector	3.2	3.3
Pension fund	1.8	3.1
Unemployment fund	0.1	0.2
Farmers	2.0	1.7
Voluntary insurance	0.3	<0.1
Municipal budget	0.3	<0.1
Regional budget	0.4	0.0
Republika Srpska government budget	7.5	3.7
One-off	1.7	0.0
Donations and contributions	0.5	0.0
Other contributions	0.0	2.1
Other income	0.0	4.4
Total	100.0	100.0

Source: *Health resource accounts, Bosnia and Herzegovina*. London, Know How Fund and Health and Life Sciences Partnership, 1999.

Notes: ^a Real financial growth (expressed in KM) was around 35%. If it were expressed in purchasing power parity (US \$ PPP), however, it would be much less.

The Ministry of Defence is the only system with a parallel, but small, health system; it provides primary health care in *ambulantas* for military personnel and their families. The Ministry of Defence also subsidizes military personnel's utilization of the civilian health system in cases where military health institutions cannot serve the health need of military patients.

Health care benefits and rationing

Despite the nominal coverage of citizens of Bosnia and Herzegovina by the compulsory health insurance scheme, many residents often experience difficulty covering the cost of care, as the health insurance system does not provide adequate coverage and out-of-pocket expenditures are prohibitively high.¹⁴ In

¹⁴ *Health care in Bosnia and Herzegovina in the context of return of refugees and displaced persons*. Geneva, UNHCR, 2001.

the absence of effective insurance coverage, people are obliged to pay the full costs of medical fees (average medical costs for birth delivery range from €160–270 in Republika Srpska to €127–360 in the Federation).

This problem stems from the fact that legislated entitlements for the receipt of publicly-financed health care in both entities are far above available resources that can be collected at present. This results in implicit rationing, with many people failing to receive the level of publicly provided care envisaged in the legislation. Within this group, some can afford to buy similar care from private health care providers. Available data suggest that this is one of the main instruments in which the gap between needed care and publicly financed care is currently bridged in Bosnia and Herzegovina. Another way to bridge the gap is for people to do without care, whatever the consequences for their health. A third mechanism involves the use of unofficial payments to public employees in publicly owned health care facilities to “reorder the queue” by giving priority access to the services to those making these payments. One quarter of those receiving health care services in 1999 – or about three eighths of those receiving publicly provided care – reported making such payments.

There is a general provision in the legislation of both entities that allows all emergency treatment to be covered, regardless of a patient’s ability to pay. Faced with perennial shortages in resources and equipment there is, however, significant pressure to preserve resources. The resulting trend has reportedly been to adopt a restrictive approach to emergency treatment, which has resulted in a limitation or rationalization of the provision of health care assistance, including emergency cases.¹⁵ It is important to mention, however, that although care may be rationalized, emergency cases cannot be turned away, as it would be considered illegal. In addition, there is a growing trend of “informal solidarity”, which involves out-of-pocket down payments from patients in small cantons where providers are reasonably certain that actual case payment is not likely to occur.

Federation of Bosnia and Herzegovina

Health care legislation in the Federation of Bosnia and Herzegovina states that every insured person has the right to a basic package of health and social services, irrespective of the amount of resources available in a district or canton. Benefits included under such compulsory insurance are as follows:

- primary health care, specialist consultative care and hospital care
- salary compensation in cases of illness
- refund of travel expenses incurred while seeking medical care.

¹⁵ Ibid.

In the case of occupational health, the insurance additionally covers preventative and rehabilitation services.

Despite the legislation in place to provide these entitlements, no specific effort has been made to quantify those services and entitlements – let alone to prepare for its administration in terms of information systems, accounting and related aspects.

Republika Srpska

According to the Constitution, the 1999 Law on Health Care and the 1999 Law on Statutory Health Insurance, pregnant women, children up to 15 years of age and population over 65 years of age are entitled to free health care. This legislation also includes sick leave coverage for up to 120 days, yet excludes long-term care for elderly people.

In December 2000, the Health Insurance Fund published the basic benefit package and adopted it as the basis for publicly funded, universally covered services.¹⁶ This document served as a discussion paper and was to be adopted in due course by the Republika Srpska government after improvements in health information and clinical protocols/guidelines enabled cost containment and increased efficiency.

The Basic Benefit Package, as devised by local experts, was approved by the Health Insurance Fund Assembly in May 2001 and is being implemented in 2001/2002. Full population coverage is only expected to happen after 2002. The package puts the government under pressure to ensure funds for all vulnerable groups; as in its mandate, it grants co-payment coverage to vulnerable groups. As the BBP includes a more limited set of services and conditions than the existing Health Insurance Fund compulsory insurance, the Fund must reduce its list of covered conditions to conserve funds.

Complementary sources of financing

Before the war, the health care system in Bosnia and Herzegovina did not receive any external funds. But for long periods during the war, it operated largely due to a massive international humanitarian effort and out-of-pocket payments from users. Among the main donors during the war, mention must be made of the European Commission Humanitarian Office (ECHO), WHO, the United Nations Children's Fund (UNICEF), the International Committee

¹⁶ WORLD BANK. *World development report 1993: investing in health*. Oxford, Oxford University Press, 1993.

of the Red Cross, Médecins Sans Frontières, and Pharmacists Sans Frontières, UNHCR, ODA/DFID and the Japanese International Development Agency.

Federation of Bosnia and Herzegovina

Out-of-pocket payments

Cantons determine the level of (and guidelines for) co-payment in public services, which depends on the user's social status/available resources. Conversely, the government has no control or regulation over private sector out-of-pocket payments where prices are determined by free-market mechanisms.

The patient is expected to pay half of his formal co-payment to the Health Insurance Fund and half to the provider. In practice, however, patients pay the provider only – and provider institutions retain all co-payments. Meanwhile, provider institutions report that they have transferred half of the actual co-payments to the Fund, yet no transfer of money occurs. It then reports the transfer of funds back to the institution through formal allocations. Co-payments, therefore, are formally counted as “payment to the institution from the insurance fund”, rather than as an out-of-pocket payment from the patient.

Mention must also be made of the largely undocumented (but estimated to be a significant portion of), under-the-table payments made by patients at the time of service.

Voluntary health insurance

The 1997 Law on Health Insurance allows private insurance organizations to offer voluntary insurance. It is up to those insurance companies to specify conditions and terms of use for services; beyond authorization, no explicit governmental regulation exists.

Private insurance enrolment 3 years after it was enacted is almost zero, with the “exception” of voluntary insurance for citizens travelling abroad, where visa requirements entail voluntary health insurance in case of accident.

External sources of finance

Since the war ended, direct donations have been combined with targeted assistance towards health system reconstruction and reform by the European Commission (EC) through the Phare programme, by WHO, the Swiss Agency for Development, the Japanese government and the United Kingdom Department for International Development. The World Bank has carried out three large projects:

1. War Victims Rehabilitation Project (US \$30 million)
2. Essential Hospital Services Project (US \$33.5 million)
3. Basic Health Project (US \$12 million).¹⁷

A number of NGOs assist through donations of drugs and through health promotion activities; projects include empowerment, improving the status of women and psychosocial support.

Republika Srpska

Out-of-pocket payments

The term “out-of-pocket payment” is used in Republika Srpska not only to designate legal co-payments but also to designate any formal payments made to private providers; there are also informal payments, among which a further distinction could be made between gratitude and black market payments. Household surveys were conducted in 1999 and 2000 to determine the level and nature of these informal payments, as these payments are outside of government regulation. The data from this study is available in the next section.

Voluntary health insurance

Voluntary health insurance in the Republika Srpska does not exist at this time.

External sources of funding

Since 1998, the focus of international donor funds has shifted from emergency aid (supplies and reconstruction) to development-oriented aid (technical assistance and training). After the war, a number of NGOs assisted to meet health care needs, mostly through donations of drugs, health promotion activities and health projects. By 1999, these donations had largely ended.

External funding has often been introduced without the Republika Srpska Ministry of Health and Social Welfare being informed, which has led to occasional friction between the ministry and the donor community.

Health care expenditure

Before the war, health services already faced problematic trends of high medical utilization and high referral rates, with health care expenditure estimated at

¹⁷ The amount in parentheses represents the total project cost.

8.2% of GDP in 1991. The WHO health for all (HFA) database, however, reports a value of 3.5% of GDP (as illustrated in Fig. 6 and Fig. 7), which is much lower for the same year. The large variation of data between different sources is a chronic problem and limits comparability and reliability of data; conclusions based on such data should therefore be carefully considered. Some think that out-of-pocket payments may have reached at least an additional 2–3% of total health expenditures at the time. All in all, per capita spending on health before the war probably amounted to about US \$245–250 per year. Although this figure is small compared with per capita resources spent on health in Organisation of Economic Co-operation and Development (OECD) countries, a gap was evident between the limitation of resources to be spent on health care by the state, and the never-ending extension of insured formal health service entitlements. During the war, health care expenditure declined sharply to an estimated US \$5–15 per person per year (around 1.25% of GDP).

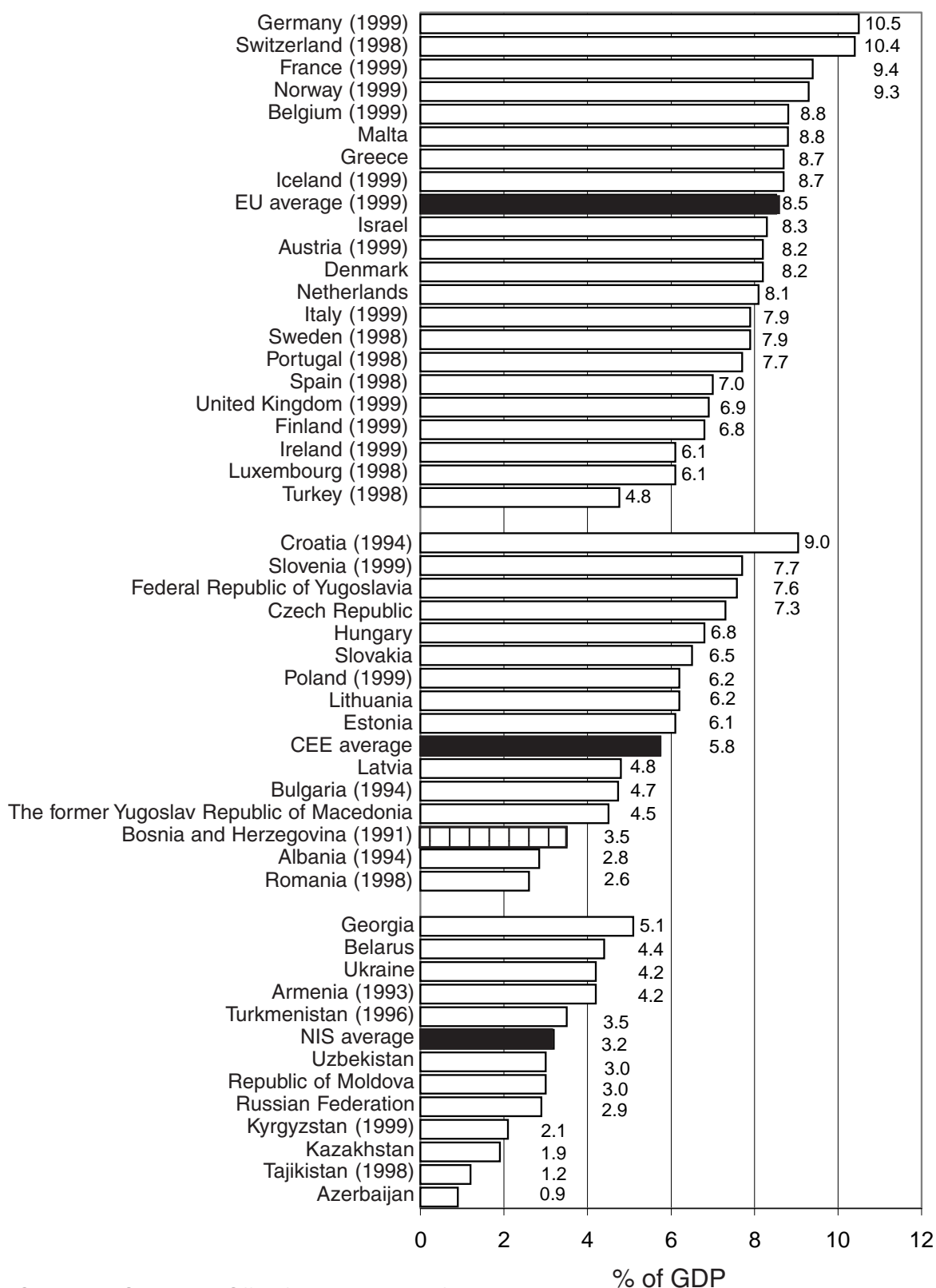
Ever since the war ended, public expenses have shown a tendency to increase rapidly, from below US \$15 in 1995 up to US \$50 in 1996 and US \$65 in 1997. Tables 6 and 7 contain the latest data available on health system expenditures.

Table 7. Total health care expenditures^a in the Federation of Bosnia and Herzegovina, Republika Srpska and all of Bosnia and Herzegovina, in 1997 and 1998

Indicator	1997			1998		
	Federation of Bosnia and Herzegovina	Republika Srpska	Total	Federation of Bosnia and Herzegovina	Republika Srpska	Total
GDP (in KM million)	4 189	1 614	5 803	5 661	1 824	7 485
Population (in millions)	2.34	1.40	3.74	2.34	1.40	3.74
GDP per person (in KM)	1 790	1 160	1 555	2 419	1 301	2 000
Health expenditure (in KM)	360	60	420	439	138	577
Health expenditure (in % GDP)	8.6 %	3.7 %	7.2 %	7.8%	7.6%	7.7%
Health expenditure per person	154	42.8	113.5	188	98	154
Domestic expenditure (in KM million)	307	48	355	404	126	530
Donor expenditure (in KM million)	51	12	63	34.6	11.6	46.2
Domestic expenditure (in % GDP)	7.3	3.0	6.1	7.1	6.9	7.1
Donor expenditure (in % GDP)	1.2	0.7	1.1	0.6	0.6	0.6

Note: ^a The exchange rate at the time was US \$1 = KM 1.8.

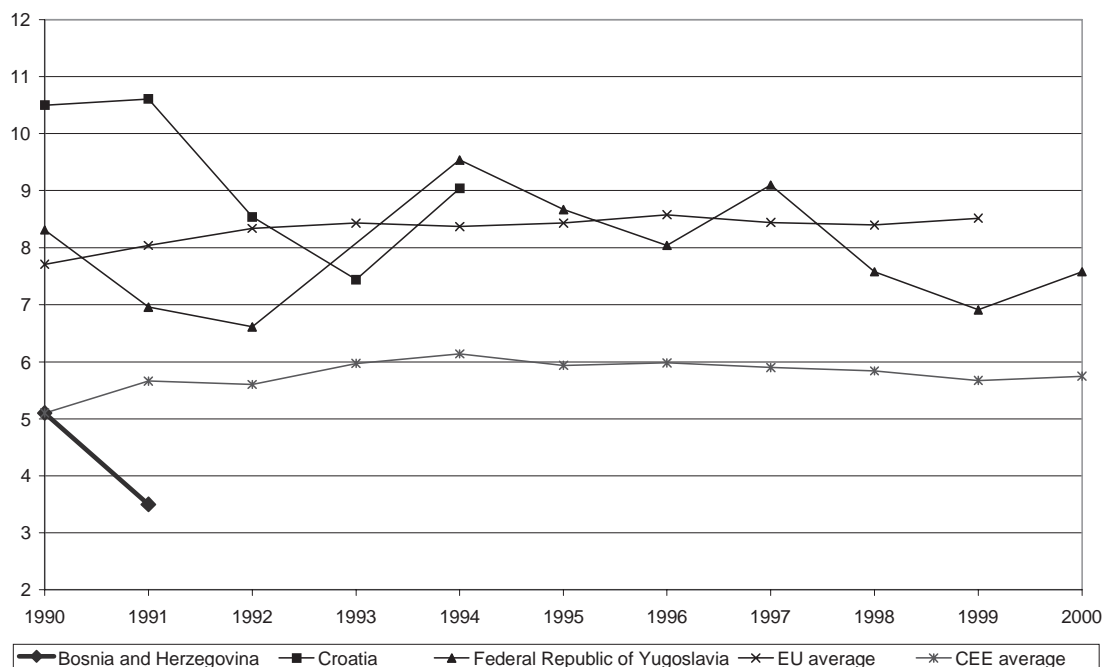
Fig. 6. Total expenditure on health as a % of GDP in the WHO European Region, 2000 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

CEE: central and eastern Europe; EU: European Union; NIS: Newly independent states.

Fig. 7. Trends in health care expenditure as a share of GDP in Bosnia and Herzegovina and selected countries



Source: WHO Regional Office for Europe health for all database.

Notes: CEE: countries of central and eastern Europe; EU: European Union.

Table 8. Private health care expenditures in all of Bosnia and Herzegovina, in 1998

Expenditures	KM million	Percentage of GDP
Hospitals	71	20
Outpatients	283	80
Total	354	100
Private expenditure per person	95	–
Private expenditure	–	4.7

Source: *Health resource accounts, Bosnia and Herzegovina*. London, Know How Fund and Health and Life Sciences Partnership, 1999.

Federation of Bosnia and Herzegovina

Although the increase in expenses has been rapid in recent years, room to manoeuvre is small, since the current insurance contribution rate of 18% of salary is rather high. Also, general resource constraints have worsened because of the already-mentioned fragmented financing system, which distorts the potential for solidarity between cantons and municipalities.

Republika Srpska

The Health Insurance Fund's financial plan for 2001 included KM 170 million and runs with an estimated 7% deficit. Outside of the public sector, there are estimates of some additional KM 80 million spent in the private sector services, as well as official and unofficial out-of-pocket payments.

Fig. 8 shows health care expenditure in US \$ purchasing power parity (PPP) per person in the WHO European Region – notably, data for Bosnia and Herzegovina is absent. The lack of available data for the whole country limits the comparison of health care expenditures (in purchasing power per person) with other European countries, and it is hoped that data collection and reporting will improve on the national level.

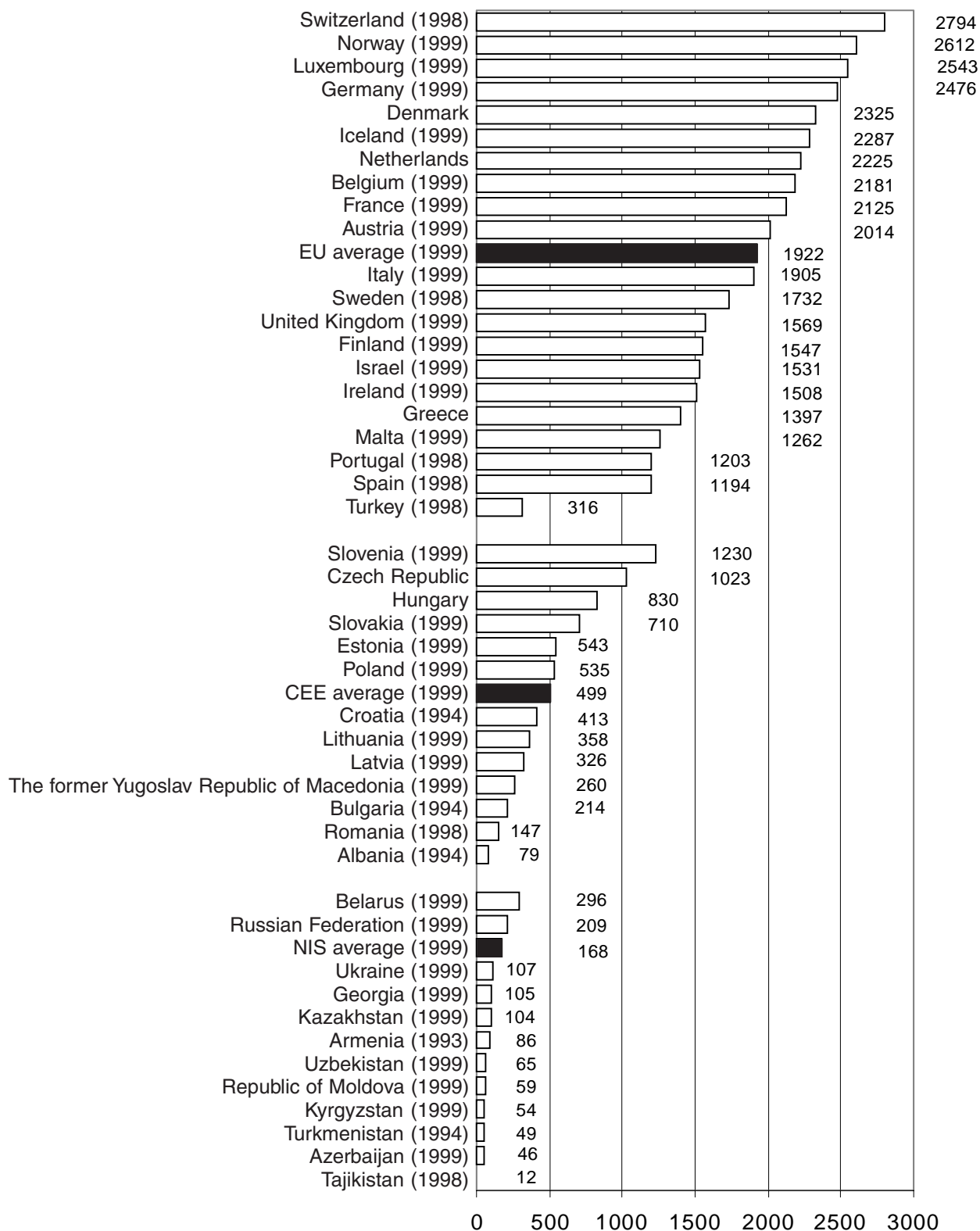
Regarding Fig. 9, the public share of total health expenditure in 1991 was 100%, which perhaps excluded envelope payments outside the public sector, the magnitude of which is unknown, as this data has been extrapolated from the former Yugoslavia. The data from Bosnia and Herzegovina in Table 6 is 10 years old; data from other European countries are more current and are therefore less comparable with Bosnia and Herzegovina.

Concluding remarks for section on ‘Health care financing and expenditure’

There are a number of problems related to resource generation and pooling that are specific to the Federation of Bosnia and Herzegovina. With respect to resource generation, the contribution rates are among the highest in Europe. Reducing payroll contribution rates may require broader tax reform. There is also a large difference in efficiency of contribution collection between cantons, as the contribution rates are roughly the same by canton, but actual collection of funds is a problem as there are a lack of incentives for the Ministry of Finance and tax collection agency to collect contributions. Another problem is that mechanisms to collect contributions from some population groups have not worked effectively. This is the case, for example, for pensioners and the unemployed, for whom transfers are to be made from the pension and unemployment funds. This transfer has not worked effectively. External consultants have suggested a medium-term option may be to use general tax revenues to finance health contributions of non-earners, such as is in practice in many countries with social health insurance systems in western Europe. A serious problem is the large informal payment sector, which makes it difficult to ascertain the true costs of services provided.

Overall, the system continues to fail to pool risks across all cantons, does not redistribute funds adequately between rich and poor, and also fails to provide

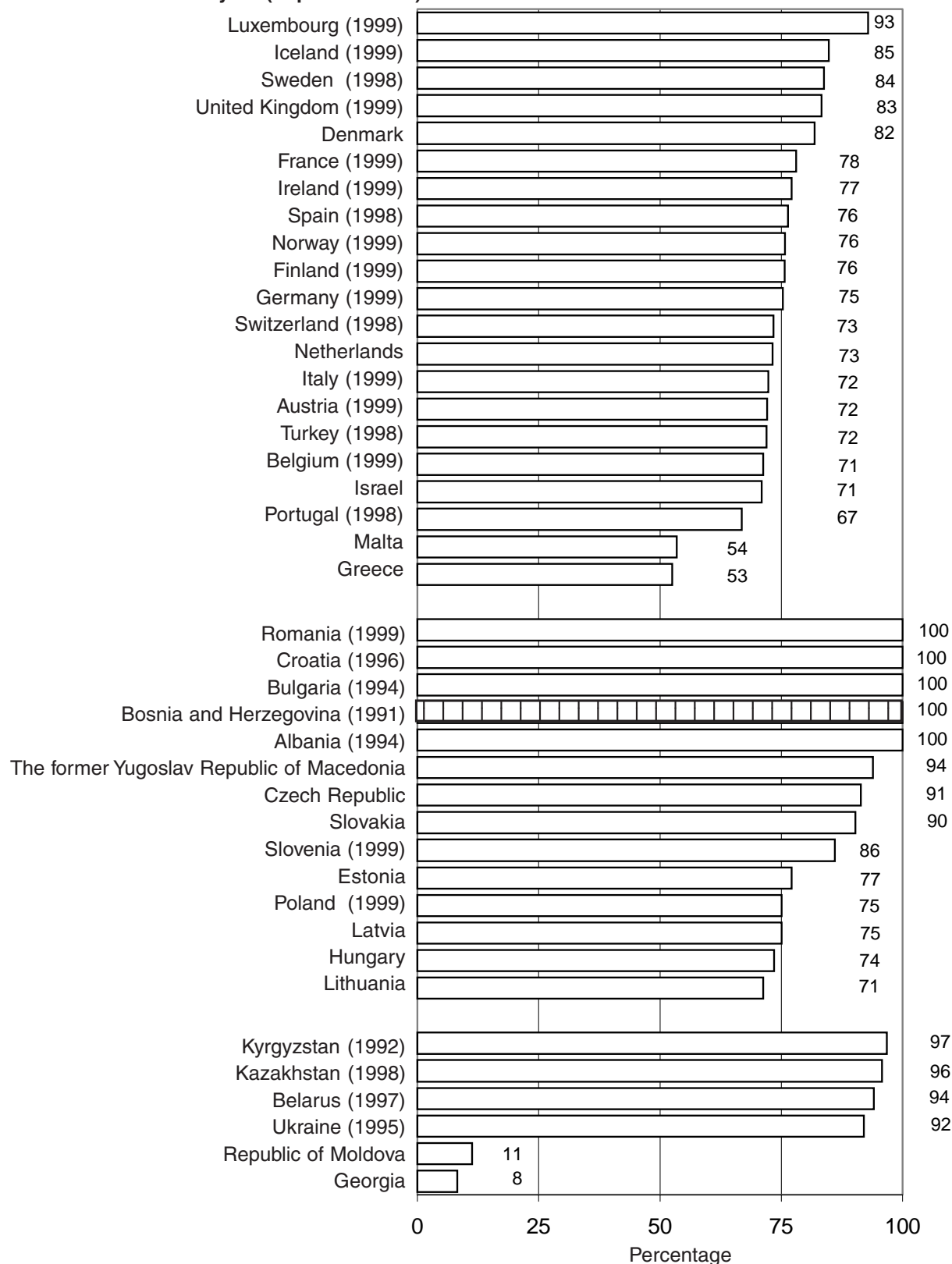
Fig. 8. Health care expenditure in US \$PPP per capita in the WHO European Region, 2000 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database. US \$PPP

CEE: central and eastern Europe; EU: European Union; NIS: Newly independent states.

Fig. 9. Health care expenditure from public sources as a percentage of total health care expenditure in countries in the WHO European Region, 2000 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

portable, universal insurance coverage for basic health services. One solution to this impasse should be the newly-introduced Federal Solidarity plan. Federal Solidarity also covers “vertical programmes” of interest to the Federation. As noted earlier, in addition to Federal Solidarity funds that are allocated from payroll tax from cantons, the same matching amount (8%) is to be paid by a budget which represents a mix of contribution funding and budgetary funding. However, the challenge for the country is solidarity at the state level between entities and Brèko district. An additional challenge is weighted distribution for poor cantons even for the basic package.

Health care delivery system

Primary health care and public health services

Primary health care has traditionally been provided through two kinds of institutions: health centres and health stations (*ambulanta*). Health centres are outpatient clinics providing not only basic care but also an array of specialized services. At present, the number of health centres in Bosnia Herzegovina is relatively large and the extensive technology installed in them is often underutilized, leading to a redundancy of structures and equipment.

Both entities have invested significant efforts and made progress in developing strategic plans for reconstructing and reforming their delivery policies and systems. These new strategies emphasize the need for rebuilding the health system with a much stronger emphasis on prevention, health promotion and primary health care. Given the public good nature of many primary care services (e.g. positive externalities arising from disease control), this shift in emphasis will certainly improve the allocative efficiency of the public health care funds in both entities. Within this framework, both entities have begun developing basic benefit packages to be provided under compulsory social health insurance. In the case of Republika Srpska, the emerging package provides benefits only for the insured, which puts the government under pressure to ensure funding for vulnerable groups. In the case of the Federation, the strategy is eventually to establish a uniform, Federation-wide package, with schemes in place to ensure equal access to the package across the Federation.

Immediately after the war, most investments in reconstructing and upgrading premises were financed through international donations; in most cases, the Ministries of Health in each entity set priorities. In addition, small investments were also conducted locally, usually without consent from the health ministry.

Funding came from foreign donations, municipal governments and out-of-pocket expenditures. Fig. 10 shows 7.0 outpatient contacts per person in 1995, in comparison with other European countries, this number is below the CEE average and higher than the EU average. This is likely not representative of primary care utilization, but is representative of the utilization of *Dom zdravljas*, which offer both primary and secondary care.

In general, Bosnia and Herzegovina municipal governments own primary health care facilities, while cantonal (Federation of Bosnia and Herzegovina) governments and the central government of Republika Srpska own hospitals. Most health facilities in the Federation are established and owned by cantons. The Federal Law on Health Protection, for example, states the following regarding ownership and funding of health institutions:

- Article 35:

Medical activities are performed by medical institutions set up by the Federation, a canton, a municipality, domestic and foreign natural or legal person, on the basis of agreement referred to in the Article 37 of this Law.

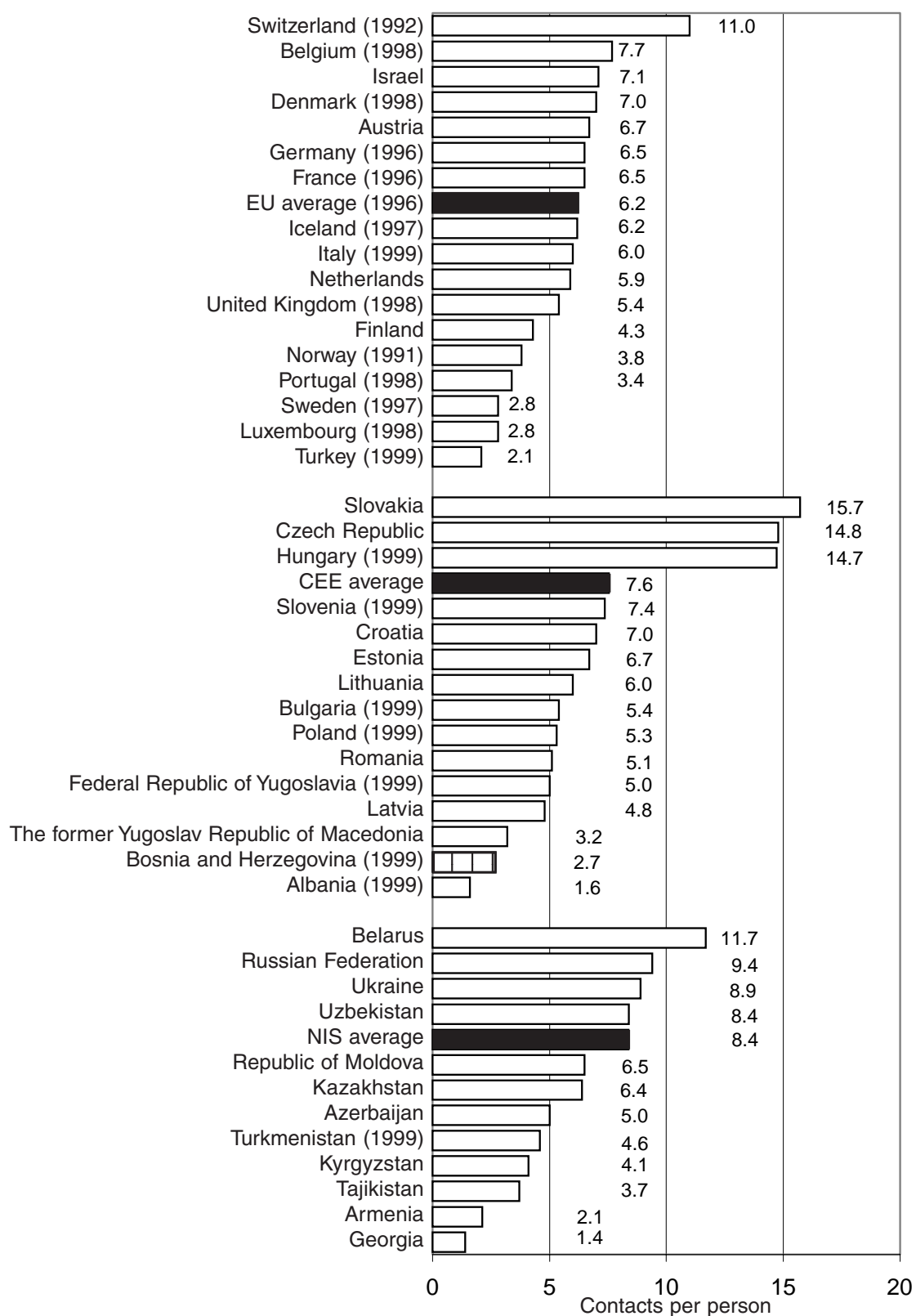
- Article 36:

Medical institutions owned by the Federation are funded by the Federation of Bosnia and Herzegovina Parliament. Medical institutions owned by a Canton are funded by a cantonal legislative authority. Medical institutions owned by a municipality are funded by the municipal council.

Under this legislation, two or more cantons in the Federation may set up clinics, as independent medical institutions, clinical hospitals, clinical–hospital centres, clinical centres and cantonal hospitals or institutes. A canton may set up: polyclinics, general hospitals, specialized hospitals, cantonal hospital, spa/rehabilitation centres and institutes, cantonal institutes for public health, outpatient clinics and institutions for home health care. And a municipality may set up: health centres, regional outpatient departments, institutions for home health care, pharmacies, spa/rehabilitation centres, and general as well as specialized hospitals.

Fig. 11 shows the decline of the measles immunization rate between 1992 and 1995, which is due to the disruption of public health immunization services during the war (as discussed in section on “Historical background (page 17). Fig. 12 shows the current level of measles immunization in the WHO European Region, which indicates a slow recovery of the immunization rate in Bosnia and Herzegovina and serves as an indication of the lack of effective primary health care services available to serve this vital public health function.

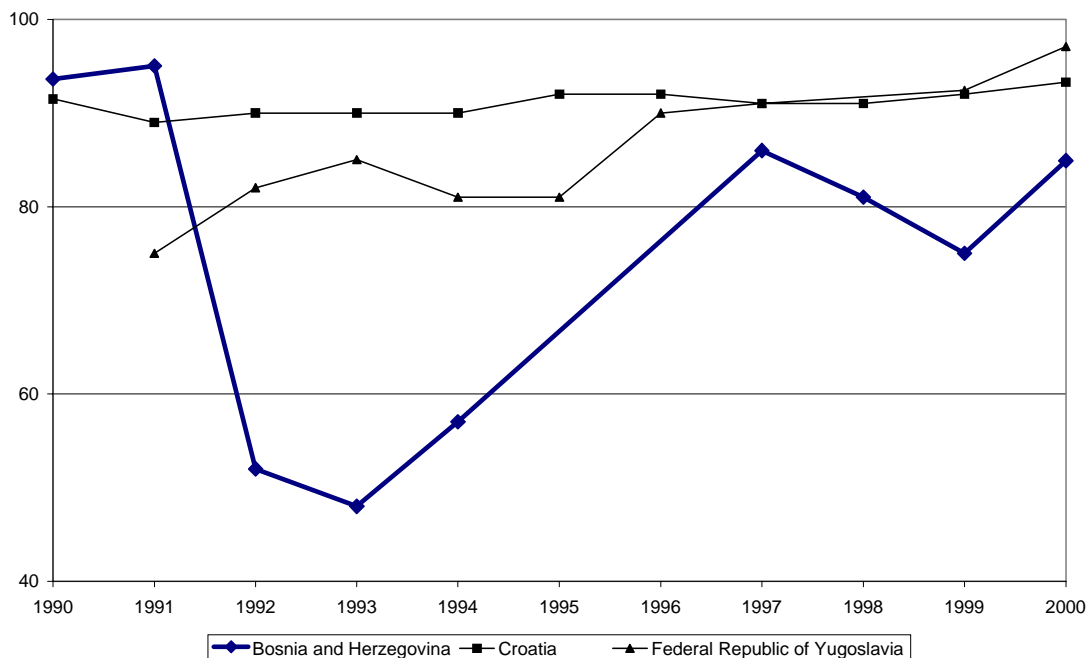
Fig. 10. Outpatient contacts per person in the WHO European Region, 2000 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

CEE: central and eastern Europe; EU: European Union; NIS: Newly independent states.

Fig. 11. Levels of immunization for measles in Bosnia and Herzegovina and selected countries



Source: WHO Regional Office for Europe health for all database.

Federation of Bosnia and Herzegovina

Public health services

Public health services in the Federation of Bosnia and Herzegovina have a duty to collect health statistics on local populations, monitor and analyse epidemiological situations, supervise compulsory immunizations and carry out the necessary measures to combat epidemics; they are also responsible for carrying out activities for health promotion and disease prevention in the community (for example, during pregnancy and the breastfeeding period), for family planning, for pre-school children and teenagers, as well as for vulnerable population groups (for example, chronic patients, the elderly, invalids and displaced persons). They also maintain hygienic surveillance of potable water; control surface water and wastewater, and water supplies; control the quality of food and medical items; supervise and participate in specific health care programmes; and analyse environmental risks to the local population.

Those services are run in chronically understaffed epidemiology and hygiene departments within personal care delivery institutions (*ambulant*s and *Dom zdravljas*) and work under the direct supervision of the ten cantonal and one Federal Public Health Institutes.

Fig. 12. Levels of immunization for measles in the WHO European Region, 2000 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

Although policy-makers generally accept the idea of health promotion-driven reform, public health services usually are underfunded. Beyond the rhetoric, the Federation of Bosnia and Herzegovina hardly has a strategy to tackle smoking, fight cardiovascular diseases or HIV/AIDS, and promote healthy lifestyles, among other health matters.

Shortcomings in the health information system abound due to the lack of several things: skills and motivation; suitable information technology; links between operational centres, such as between the health insurance institutions, the public health institutions and health care facilities); and uniform standards for indicators. There are plans in place for restructuring all levels of information collection and processing, including those for population registers.

Primary health care

The institutions that provide primary health care are *ambulant*s and *Dom zdravljas* – the former are field branches (or units) of the latter. There are currently 87 *Dom zdravljas* in the Federation of Bosnia and Herzegovina, each covering a population of 30 000–50 000 residents.

According to the Law on Health Care, primary health care includes services and activities pertaining to family medicine, general medicine, school medicine, hygiene, epidemiology, dental care, emergency medical care, occupational medicine, protection of women and children, diagnostics, and pharmaceutical care.

Medical services provided by *Dom zdravljas* include: general practice, maternal and child health, school medicine, health care for specific and non-specific lung diseases and dental care; they also ensure hygiene services (epidemiological activities), emergency medical aid, laboratory, radiology, and other diagnostic services. In the area of each *Dom zdravlja*, there is an ambulatory service located in the district (usually one emergency service for 2000–10 000 people).

The role of the health centre is to provide first contact care and preventive services, health education, and rehabilitation, while coordinating the efforts of various specialist groups. The health centre is typically staffed with general practitioners and nurses. Small health centres with general practitioners (GPs) and nurses offer health services to the population in those areas and refer people to other health care establishments.

Dom zdravljas also organize units to perform specialized services, if such services are not organized within other health institutions; some *Dom zdravljas* have a small maternity hospital attached, temporary accommodations for patients and centres for physical and mental rehabilitation. This current

organizational model encourages fragmentation of care through an excessive supply of specialists at the primary care level.

Ambulantas, which are purely outpatient clinics, form another type of primary health care institution; they employ family doctors, dentists and community health nurses. These outpatient clinics may be organized as a part of a medical centre or as a private practice.

A critical view of the *ambulanta* and *Dom zdravlja* network would point out that they were originally designed as the base of a health care pyramid; the next layer would be a general hospital; and complex medical services were to be provided by “clinical centres”/university hospitals. Primary health care services were oriented towards specific age-, gender- or occupation-related population groups and also towards therapeutic measures, while health promotion and prevention measures were neglected.

The health care sector, however, especially in urban areas, became and continues to be burdened with specialists. So far, much of the primary care in Bosnia and Herzegovina is in the hands of specialists, due to the underdevelopment of community-based primary care, oversupply of specialists and lack of adequately trained GPs. There are 1376 medical doctors in primary health care in the Federation of Bosnia and Herzegovina, of which 713 are specialists; this is in contrast to 3176 nurses, of which only 190 have a higher education. The inflation of specialists has made ambulatory services more expensive and split health care into those who overuse services (mainly the urban population) and those who barely have access to services (the rural population).

It is estimated that only about 50% of cases consulted are solved at the primary care level; the rest are referred to the secondary and tertiary care level. A discussion of secondary care will follow in the next section. Box 1 shows the figures for primary care services (delivered in ambulatory–polyclinic settings) in 1999, according to official statistics.

Box 1. Primary care services in 1999

- Total number of consultations with physicians: 7 230 463 (this gives 3.14 consultations with a doctor per person in the Federation of Bosnia and Herzegovina), of which 2 770 379 were first contacts
- Total number of consultations with other health care workers: 6 021 880
- Home visits by physicians: 92 735
- Home visits by other health professionals: 739 410
- Number of referrals to specialists: 1 209 148
- Laboratory tests: 890 547

Source: *Network, capacities and functions of the health systems in Bosnia and Herzegovina*, Federal Public Health Institute, 1999.

Republika Srpska

Public health services

As a consequence of the war, Republika Srpska had to establish its own autonomous public health infrastructure with its own technical equipment and professional capacity – building on those existing in that part of the territory.

Following a phase of restructuring funded by ECHO (which contributed largely to this development by providing technical equipment and manpower support), the public health infrastructure in Republika Srpska now meets the minimum requirements of a public health system.

The public health network in Republika Srpska is based on three tiers.

1. The first tier comprises the epidemiological services in municipal public health centres that are responsible for preventive activities and communicable disease surveillance.
2. The second tier comprises five regional public health institutes in Doboj, Zvornik, Srpsko Sarajevo, Srbinje and Trebinje, which conduct epidemiological surveillance, data collection and environmental monitoring; and
3. The Republika Srpska Public Health Institute, in Banja Luka, is the third tier and is responsible for health planning, epidemiological surveillance, environmental monitoring and health promotion. The Republika Srpska Public Health Institute is also responsible for the training of some of its technical personnel and supervises immunization that is undertaken by municipal health centres.

Although the Republika Srpska public health structures are able to perform disease prevention and health promotion functions, there is still much space for improvement. The main shortcomings identified are: insufficient budgetary allocation and low standing of public health; low ranking of public health as a priority in comparison to curative services; lack of adequate statistical capacities; an insufficient emphasis on water and food monitoring; and insufficient qualified staff.

Primary health care

Primary health care is the first tier of medical care for patients in Republika Srpska and comprises all measures to support and promote individual and community health, prevent diseases, and provide diagnostic, educational, therapeutic and rehabilitation health care by either medical or nonmedical services at the local level.

As was the case before the war, the institutions that provide primary health care are the *ambulant*s and *Dom zdravljas*. The Republika Srpska utilizes the same structures in *ambulant*s and *Dom zdravljas* as does the Federation of Bosnia and Herzegovina (see the section on “Primary health care and public health services” above for a discussion of these levels of care).

Following the 1999 Law on Health Care and Health Insurance, residents in Republika Srpska are expected to freely select a family medicine team that should act as “gatekeeper” and entry point to non-emergency medical care for the minimum period of 1 year and provide, partly on-call, 24-hour health care. The team provides health education; preventive measures against communicable diseases; detection and reduction of noncommunicable risk factors; diagnosis and treatment of diseases not requiring complex examinations and treatments; home care for patients without the need for hospital treatment; and prolonged treatment and rehabilitation of patients following hospital discharge. These measures, however, have not yet been implemented in the entire territory. For the time being, family medicine teams only exist in the Banja Luka and Doboј teaching centres and pilot municipality of the World Bank financed Basic Health Project Laktasi.

Additionally, the Law on Health Care stipulates that in order to receive patients, private practices must register as health institutions with the Ministry of Health. There are, however, no regulations, clinical guidelines or pricing guidelines for private practitioners. Also, private pharmacies do not register with the Ministry, as a pharmacist’s registry has not yet been set up.

The Republika Srpska primary health care system has many shortcomings. Before the war, patients seemed to have become accustomed to a system with no gatekeeper function, poor coordination of care, and often limited access to care, especially for the elderly and disabled. The primary health care function was devalued within the medical profession and delegated to specialists exclusively. There were system-wide problems with medical-record documentation, which led to registering encounter data more frequently than clinical data. Moreover, there was no system of scheduled appointments, so patients often waited for extended periods in the mornings, whereas the premises were empty in the afternoon. There are attempts to ameliorate these shortcomings in both Republika Srpska and the Federation through investments in the entity health information system, as well as through the introduction of appointment systems in health centres.

A number of key challenges confront reconstruction and reform of the primary care system. Among these challenges are the following:

- lack of patient-centred and continuous care, due in particular to the rigid structure of the *Dom zdravljas* and the weak role of the GP function;
- inequity in access to health services, due to several factors, such as an increasing tendency of under-the-table payments for prompt treatment; and
- poor staff motivation, due to low salary levels, poor opportunity for career advancement and a system driven by specialists.

Secondary and tertiary care

Secondary level health care in Bosnia and Herzegovina includes all specialized health services provided after the first line of primary care. Secondary care includes services provided in general and specialized hospitals, clinical centres (university hospitals) and specialized departments in *Dom zdravljas*. Services are provided on an inpatient or outpatient basis after a patient is referred (with the exception of emergency care). Specialized personal health services are also provided in institutes for blood transfusion, occupational medicine and sports medicine, and physical medicine and rehabilitation. The centres for Physical Medicine and Rehabilitation, for example, provides the following services: rehabilitation of patients with amputated limbs, application of orthopaedic aids, rehabilitation of patients suffering from neurological diseases, and rehabilitation of children suffering from cerebral impairments and disabilities with other causes.

There are four types of hospitals: clinical centres (3 in the Federation and 2 in Republika Srpska), general acute hospitals (14 in the Federation and 9 in Republika Srpska), specialized hospitals (4 in the Federation and 3 in Republika Srpska), and small district hospitals (12 in the Federation). These existing hospitals in Bosnia and Herzegovina were built between 1945 and 1990, a period when clinics and hospitals rapidly increased in a disorganized manner. The resulting imbalance, exacerbated by destruction during the war, had to be corrected after the war. In 1991, Bosnia and Herzegovina had 201 120 hospital beds, 4.6 beds per 1000 residents, of which 71.8% were located in general hospitals, 17.3% in specialized hospitals and 10.9% accounted for chronic and rehabilitative care. The average length of stay was 13.3 days, and the occupancy rate was 71.6%. By 1999, Bosnia Herzegovina had 3.7 beds per 1000 residents in 1999 (3.6 in the Federation and 3.8 in Republika Srpska), lower than the pre-conflict rates, but broadly in line with the World Health Organization's (WHO) norm of 4 beds per 1000 resident in the region, thanks to extensive donor-funded reconstruction/rehabilitation efforts.

Hospital utilization rates are also somewhat below their pre-conflict levels. More importantly, owing to the fragmentation of the health system across the country, both the availability of hospital beds and their rate of use vary

considerably, especially across the cantons of the Federation, with limited access to some services in certain localities.¹⁸

The level of acute beds per hospital is shown in Fig. 13, Fig. 14 and Table 9; in these figures, Bosnia and Herzegovina shows a relatively low level of acute bed availability compared with the level in the European Region – specifically in the EU and CEE, as well as in comparison with the countries of the former Yugoslavia. The low number of beds before the war may be related to the lack of systematic hospital planning, and the war further exacerbated this problem through the destruction of facilities. Also of note are the data omissions for Bosnia between 1991 and 1997.

The occupancy rate in 1995 was quite low, indicating that there is space for efficiency gains in hospital capacity. Table 9 shows an admission rate of 7.2 per 1000 population – consistent with the low number of beds, compared with other central and eastern European countries and most western European countries.

The inherited hospital management system functions poorly in Bosnia and Herzegovina. Amateurism in hospital management and a low level of specific managerial education are major characteristics of current hospital directors. Input-related funding and the lack of modern managerial instruments, such as information systems, often make hospital management rigid and unable to react to changes.

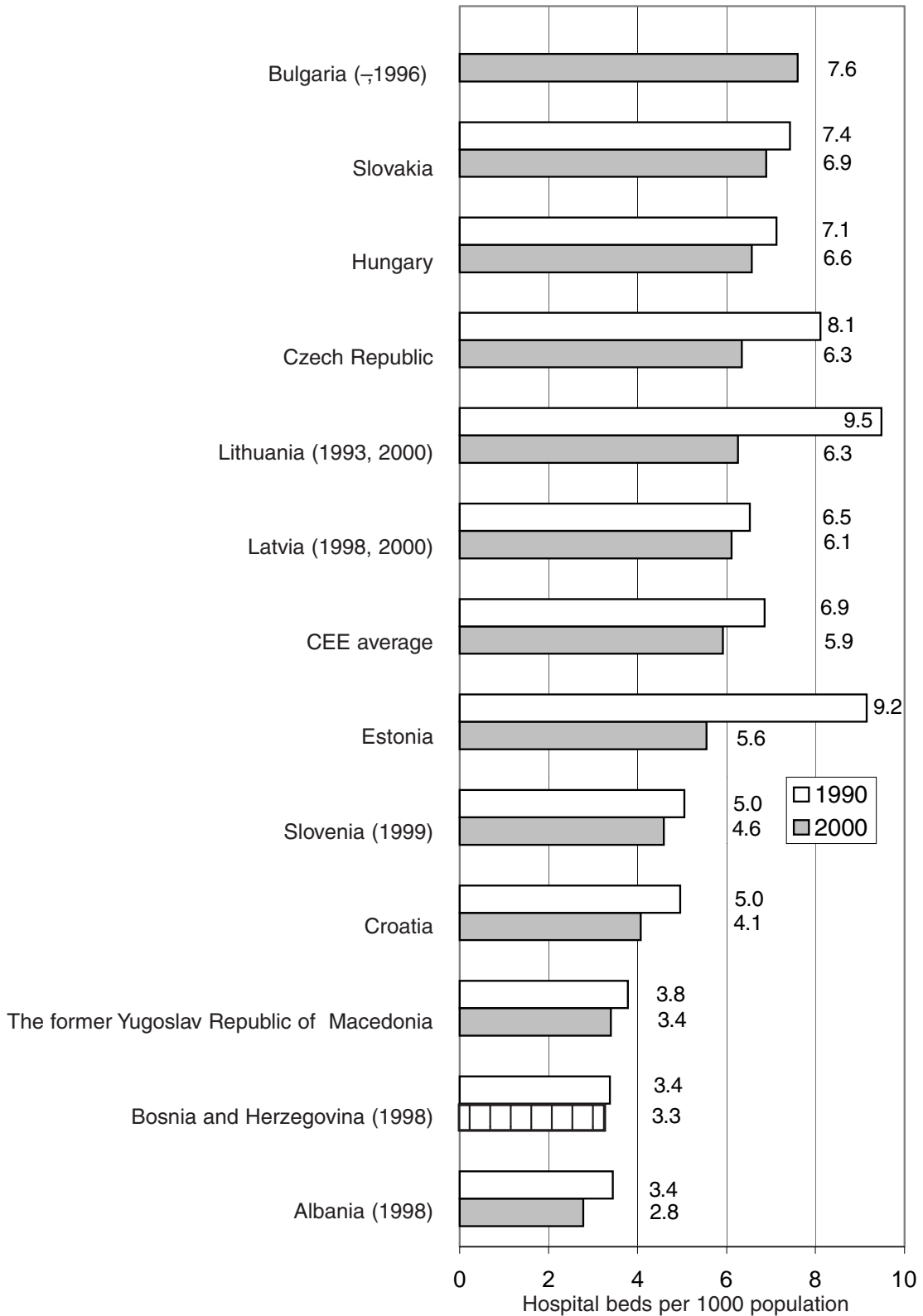
Federation of Bosnia and Herzegovina

General hospitals in the Federation of Bosnia and Herzegovina provide services to 70 000–150 000 residents upon referral from regional hospitals and through direct access in emergencies. A typical general hospital has at least four departments: internal medicine, surgery, paediatric care, and gynaecology/midwifery.

Before the war, there were general hospitals in Drvar, Livno, Jajce and Travnik. As part of the postwar readjustments in the health care system, there are plans in place to establish general hospitals in Sarajevo, Tesanj, Orasje, Gorazde and Sanski Most. Secondary care in the Federation of Bosnia and Herzegovina is now provided in 3 clinical centres (university hospitals), 14 general and cantonal hospitals, 4 specialized hospitals, and 12 health stations within the *Dom zdravljas*. There are also various specialist institutions performing specialist counselling and health care for particular categories (for example, institutes for workers, students, urgent cases, professional medicine and sports medicine).

¹⁸ E. JAKUBOWSKI AND N. JAGANAC. *Restructuring Hospitals: Bosnia and Herzegovina*. Eurohealth, Vol.6. Number 3;

Fig. 13. Hospital beds in acute hospitals per 1000 population in central and eastern Europe, 1990 and 2000 or latest available year (in parentheses)

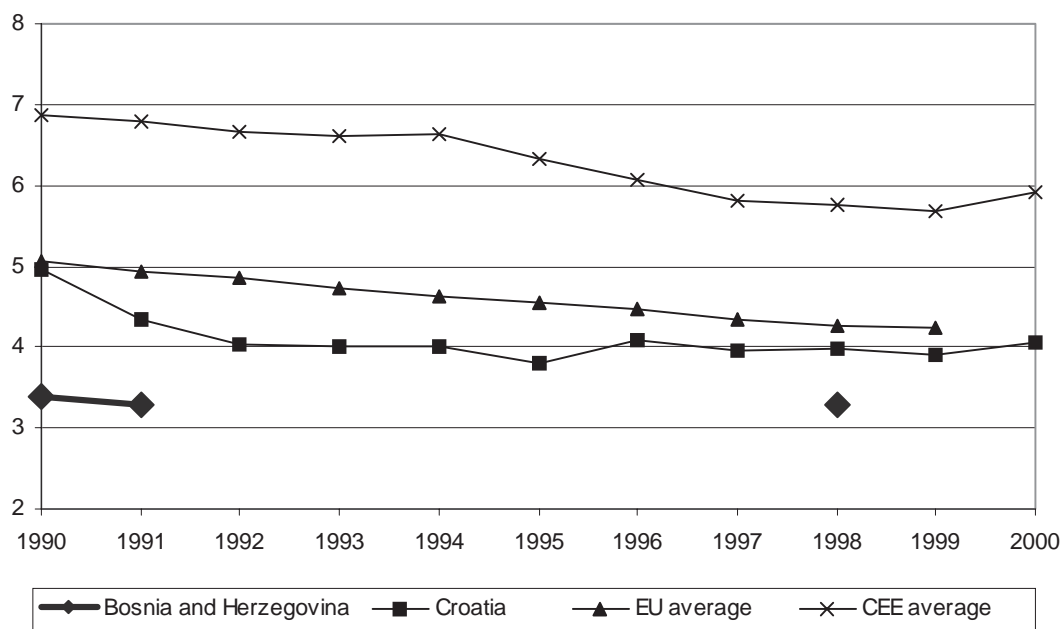


Source: WHO Regional Office for Europe health for all database.

CEE: central and eastern Europe.

Bosnia and Herzegovina

Fig. 14. Hospital beds in acute hospitals per 1000 population in Bosnia and Herzegovina and selected countries, 1990-2000^a



Source: WHO Regional Office for Europe health for all database.

Notes: ^a Data are not available for the Federal Republic of Yugoslavia; CEE : countries of central and eastern Europe; EU : European Union.

As seen in Box 2, the majority of physicians operating in the Federation of Bosnia and Herzegovina are specialists. Despite this abundance, there is an uneven distribution of specialists throughout the country – favouring urban areas and often leaving rural outposts with limited staffing. There is also a low proportion of nurses with a higher education; this creates barriers to specialized nurses training, and low pay and marginalization are disincentives for further nursing education in the Federation of Bosnia and Herzegovina.

Box 2. Consultative-specialist care statistics for the Federation of Bosnia and Herzegovina (excluding Posavina, Zapadna Hercegovina and Hercegbosanski, and Croat cantons), 2000

- Medical doctors: 357, of which 341 are specialized
- Nurses: 517, of which 84 have a higher education
- Total number of consultations in the year 2000^a 1 656 936, of which 690 462 were first time consultations
- Total number of consultations with non-physicians: 1 956 603

Source: *Network, capacities and functions of the health systems in Bosnia and Herzegovina*, Federal Public Health Institute, 1999.

Notes: ^a Preventive check-ups are excluded. Preventive check-ups include the following: systematic check-up, periodic check-up, targeted check-up, and control after systemic and periodic check-ups. There were a total number of 91 914 preventive check-ups in 1999.

Table 9. Inpatient utilization and performance in acute hospitals in the WHO European Region, 2000 or latest available year

Country	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days	Occupancy rate (%)
Western Europe				
Austria	6.2	27.2	6.3	75.5
Belgium	5.5 ^b	18.8 ^b	8.7 ^b	79.9 ^b
Denmark	3.3 ^a	19.1	5.5	79.9 ^a
EU average	4.2 ^a	19.0 ^b	8.2 ^b	77.0 ^b
Finland	2.4	20.2	4.3	74.0 ^e
France	4.1 ^a	20.0 ^a	5.5 ^a	77.4 ^a
Germany	6.4 ^a	20.3 ^a	10.7 ^b	81.6 ^b
Greece	3.9 ^a	14.5 ^c	—	—
Iceland	3.7 ^d	18.1 ^e	6.8 ^e	—
Ireland	3.0 ^a	14.1 ^a	6.5 ^a	83.0 ^a
Israel	2.3	17.5	4.3	94.0
Italy	4.5 ^b	17.1 ^b	7.1 ^b	74.1 ^b
Luxembourg	5.5 ^b	18.4 ^f	7.7 ^b	74.3 ^f
Malta	3.7	11.2	4.6	75.5
Netherlands	3.3	9.1	7.7	58.4
Norway	3.1	15.5	6.0	85.2
Portugal	3.1 ^b	11.9 ^b	7.3 ^b	75.5 ^b
Spain	3.0 ^d	11.2 ^d	8.0 ^d	77.3 ^d
Sweden	2.5	15.6 ^b	5.5 ^a	77.5 ^d
Switzerland	4.0 ^b	16.4 ^b	10.0 ^b	84.0 ^b
Turkey	2.2	7.6	5.4	58.7
United Kingdom	2.4 ^b	21.4 ^d	5.0 ^d	80.8 ^b
CEE				
Albania	2.8 ^b	—	—	—
Bosnia and Herzegovina	3.3 ^b	7.2 ^b	9.8 ^b	62.6 ^a
Bulgaria	—	14.8 ^d	10.7 ^d	64.1 ^d
CEE average	5.9	19.1	8.3	72.8
Croatia	4.1	13.9	9.2	86.3
Czech Republic	6.3	18.7	8.8	70.7
Estonia	5.6	18.7	7.3	66.1
Hungary	6.6	22.4	6.7	72.5
Latvia	6.1	20.0	—	—
Lithuania	6.3	20.9	8.3	76.0
Slovakia	6.9	18.9	9.4	71.0
Slovenia	4.6 ^a	16.1	7.6 ^a	73.2 ^a
The former Yugoslav Republic of Macedonia	3.4	8.9	8.4	60.1
NIS				
Armenia	4.9	4.9	10.3	28.2
Azerbaijan	7.3	4.7	15.4	28.5
Belarus	—	—	—	88.7 ^f
Georgia	4.3	4.5	7.8	83.0
Kazakhstan	5.5	14.1	11.5	97.0
Kyrgyzstan	6.1	15.5	12.3	90.2
NIS average	6.4	15.3	12.9	84.6
Republic of Moldova	6.3	13.1	11.9	66.6
Russian Federation	9.2	21.1	13.5	85.8
Tajikistan	5.9	9.0	13.2	59.8
Turkmenistan	6.0 ^c	12.4 ^c	11.1 ^c	72.1 ^c
Ukraine	7.2	18.4	12.7	88.1

Source: WHO Regional Office for Europe health for all database.

Note: ^a 1999, ^b 1998, ^c 1997, ^d 1996, ^e 1995, ^f 1994, ^g 1993, ^h 1992, ⁱ 1991, ^j 1990.

Bosnia and Herzegovina

Box 3 provides sub-national data on bed occupancy rate and average length of stay inside the Federation of Bosnia and Herzegovina, which reveals the uneven distribution of hospital utilization between the cantons. These differences are due to differences in population size and specialization of care – further emphasizing the need to expand risk pools between cantons so that poorer and less populated cantons are not left with an unfair risk burden.

Box 3. Hospitals statistics for the Federation of Bosnia and Herzegovina (excluding Posavina, Zapadna Hercegovina and Hercegbosanski, and Croat cantons), 2000

- Number of beds: 8751
- Number of operating rooms: 105
- Number of discharges: 206 320, of which 6146 were deceased
- Days of treatment: 2 107 347
- Number of operations: 48 091
- Bed occupancy rate: 65.9% (ranging from 26.3% in Zapadnohercegovacki canton to 77.3% in Sarajevo canton)
- Average length of stay: 10.2 days (differing significantly among cantons: from 2.8 days in Zapadnohercegovacki canton to 11.9 days in Sarajevo canton).

Source: Network, capacities and functions of the health systems in Bosnia and Herzegovina, Federal Public Health Institute, 1999.

Republika Srpska

There were 7500 hospital beds in the territory of Republika Srpska after the war. The government opted to not replace war-damaged beds after the war, using this as an opportunity to cut bed numbers from 4.6. to 3.8 beds per 1000 inhabitants. In the year 2000, additional beds were removed, further reducing the bed numbers to 3.6 beds per 1000 inhabitants (a total of 4881 hospital beds). Of these remaining beds, about 77.5% are devoted to hospital treatment on the secondary level, 6% to physical medicine and rehabilitation, 4.4% to chronic psychiatric diseases, and 12% to tertiary care. Utilization of these bed capacities is, on average, below 70%, indicating that a further reduction is possible.

The hospitals are either general or specialized. General hospitals (same four specialities as in the Federation of Bosnia and Herzegovina) provide health care to citizens of all age groups for patients suffering from a wide range of diseases, and they cover several municipalities. There are general hospitals in Prijedor, Gradiška, Doboј, Bijeljina, Zvornik, Trebinje, and Nevesinje. General hospitals may also have a ward for orthopaedic and physical medicine, infectious diseases, psychiatry, neurology, skin diseases, eye diseases, urology, lung diseases and diseases of the ear, nose and throat.

Specialized hospitals either provide health care to populations of specific age groups or specialize in a particular disease group, such as psychiatric disorders and long-term care. Apart from hospital *personal* care, doctors employed in hospitals also provide consultancies to non-hospitalized patients, upon referrals from the primary care doctors.

Complex secondary care and tertiary care are provided in clinical centres – a term given in Republika Srpska to university hospitals. A clinical centre established by the Government of Republika Srpska is a highly specialized institution that provides specialized tertiary care, as well as some scientific research. The one in Banja Luka has 1327 beds, of which around 350 are devoted to secondary care and 980 to tertiary care; it covers 11 municipalities. The smaller Clinical Centre in Srpsko Sarajevo has 776 beds and covers 14 municipalities.

Social care

Social care in Bosnia and Herzegovina today is mainly for the chronically ill, disabled, elderly and poor. There are special programmes for social and health protection for children and families, the mentally handicapped, the elderly, and civilian war victims; these programmes are grouped within the following categories: threatened populations, orphans, neglected children, and children with psychopathological conditions.

War victims requiring long-term care are treated in centres for physical and mental rehabilitation, and for mental and physical handicaps. It is estimated that up to 60% of the country is in a social need category, such as refugees, displaced persons, children having lost both or one parent and pensioners. Despite the high demand, social care facilities and their financial status do not appear to sufficiently meet the needs of this group in need of care. As a consequence of the lack of availability and limited financing of appropriate facilities, many adult patients who seek social care receive long-term care in hospitals, rather than in social care settings.

Federation of Bosnia and Herzegovina

In the Federation of Bosnia and Herzegovina, all 10 cantons provide social and child protection within 79 local centres. Of these centres, 59 provide social work, and 20 community councils offer services of a similar type. These bodies employ a total of 622 workers and provide social protection for all the districts of the Federation of Bosnia and Herzegovina. Most of these institutes have been modernized, and some have been newly established. There are a number of specialized institution and local and international NGOs that provide care for orphans. For example, “SOS Kinderdorf International” formed two “SOS children villages” (in Sarajevo and Graèanica). The Rudolf Walter Foundation has funded a “children’s village” in Lukavac, and the NPA formed the “Bridge of Zenica”, with the goal of caring for children without parents.

A population of considerable need has been the internally displaced persons. Since 1998, eight social care centres were newly formed in Sarajevo to serve as day centres for those seeking asylum.

Republika Srpska

Social care in Republika Srpska may be provided in social care institutions or may be non-institutionalized and provided by volunteers. The social centres decide on eligibility for social care of the elderly and refer the patient to social care institutions. Many adult patients, however, seek long-term nursing care in hospitals.

Human resources and training

Overspecialization has been a characteristic of medical resources in Bosnia and Herzegovina for years, which has raised concerns about denial of primary health care, fragmentation of services and cost inflation. Although health sector professionals in Bosnia and Herzegovina enjoy a rather high status and have fairly solid postgraduate education, their salaries have always been low, which contributes to a degree of professional dissatisfaction. Another problem is the use of outdated equipment – up to 20 years old on average.

There are five medical schools in Bosnia and Herzegovina. This seems like an excessive amount in light of a population of less than 4 million after the war and significant resource constraints that prevent coverage of even essential services. The oversupply of medical schools has obvious implications, not only in terms of the quality of education and training but also in terms of the likely impact on future health care expenditures. The impact of these constrained

financial and academic resources has led to a low ratio of nurses and physicians to the country's population. Bosnia and Herzegovina has the third lowest physician and nurse to population ratio in the European Region and the lowest ratio of the former Yugoslav republics (see Figs. 15–17 for details).

The family medicine model is currently being implemented in pilot cantons/regions in both entities under the World Bank-financed Basic Health Project. Several years ago, Bosnia and Herzegovina had at least six different approaches to the development of family medicine. Today, a standard curriculum has been developed and adopted through legislation in both entities. Equally, retraining programmes for physicians have been introduced through the Basic Health Project. This is ensuring that one single curriculum for family medicine is being applied in Bosnia Herzegovina.

Additionally, a second World Bank sponsored pilot programme under the Basic Health Project is the establishment of Health Management Centres in both entities in order to standardize health management training, practice and to create managers able to operate in any facility across the country. The training will be provided under the same curriculum approved by both entities. The significance of the common curriculum is that professors of health management will be able to teach in both entities.

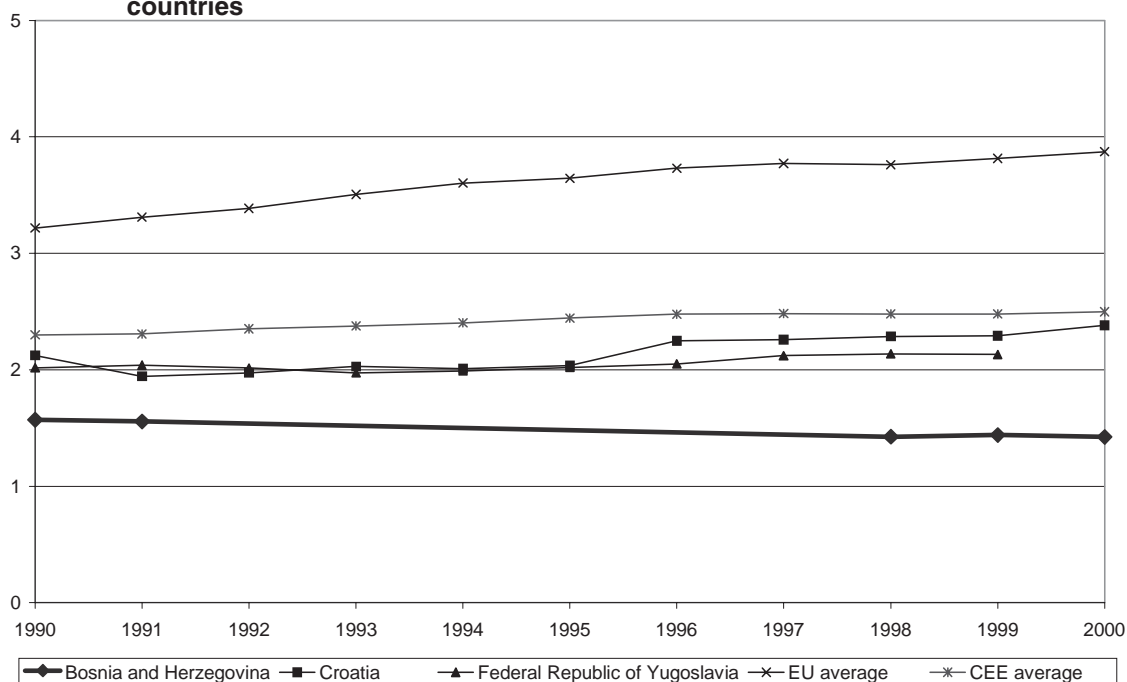
Federation of Bosnia and Herzegovina

The Federation of Bosnia and Herzegovina has some 1.47 doctors per 1000 inhabitants. There is, however, a substantial variety in regional distribution, both in central *Dom zdravljas* and field *ambulant*s and between rural and urban areas.

Medical education in the Federation of Bosnia and Herzegovina lasts 6 years and is provided in three medical schools (“faculties”), in Sarajevo, Mostar and Tuzla. The medical curriculum includes parallel theoretical and practical work. Dentists and pharmacists can receive their education in Sarajevo; the education of dentists lasts 6 years and that of pharmacists 5 years. After completion of studies, there is a mandatory year of practical “residency” for all doctors, pharmacists and dentists. Following this additional year of training, passing a state examination is required; after passing this examination, all health professionals are permitted to work independently.

A specialized medical education can be obtained after completing basic medical training and ranges from 3 to 5 years, depending on the area of speciality. Postgraduate education for dentists and pharmacists is provided in the respective faculties. Pharmacists receive a very specialized education, and many of them develop a specialized career.

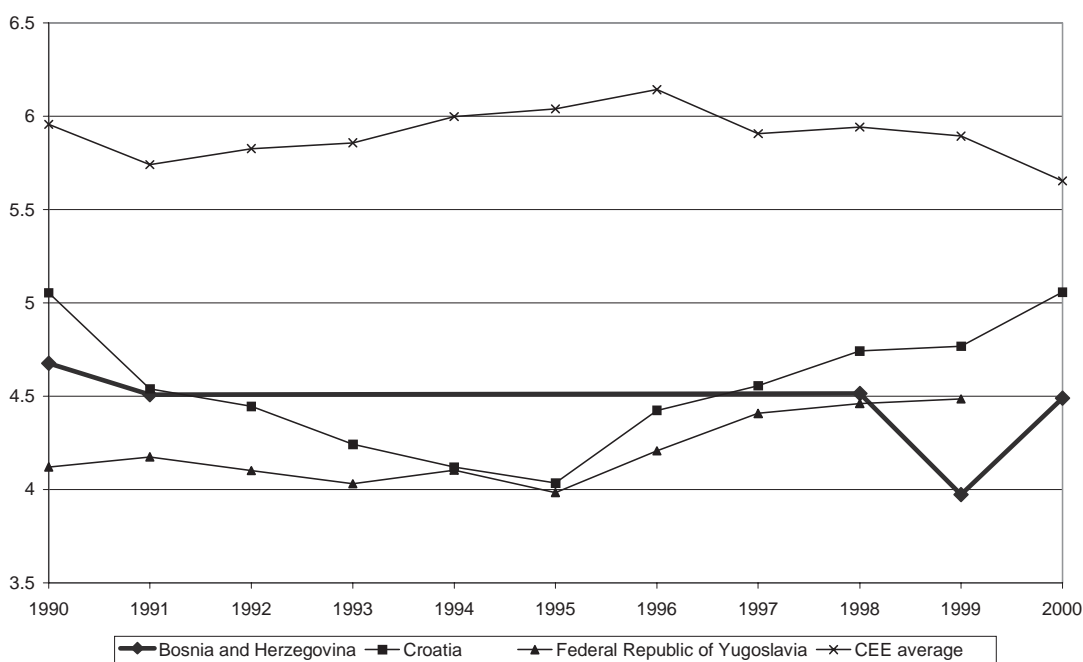
Fig. 15. Physicians per 1000 population in Bosnia and Herzegovina and selected countries



Source: WHO Regional Office for Europe health for all database.

Notes: CEE: countries of central and eastern Europe; EU: European Union.

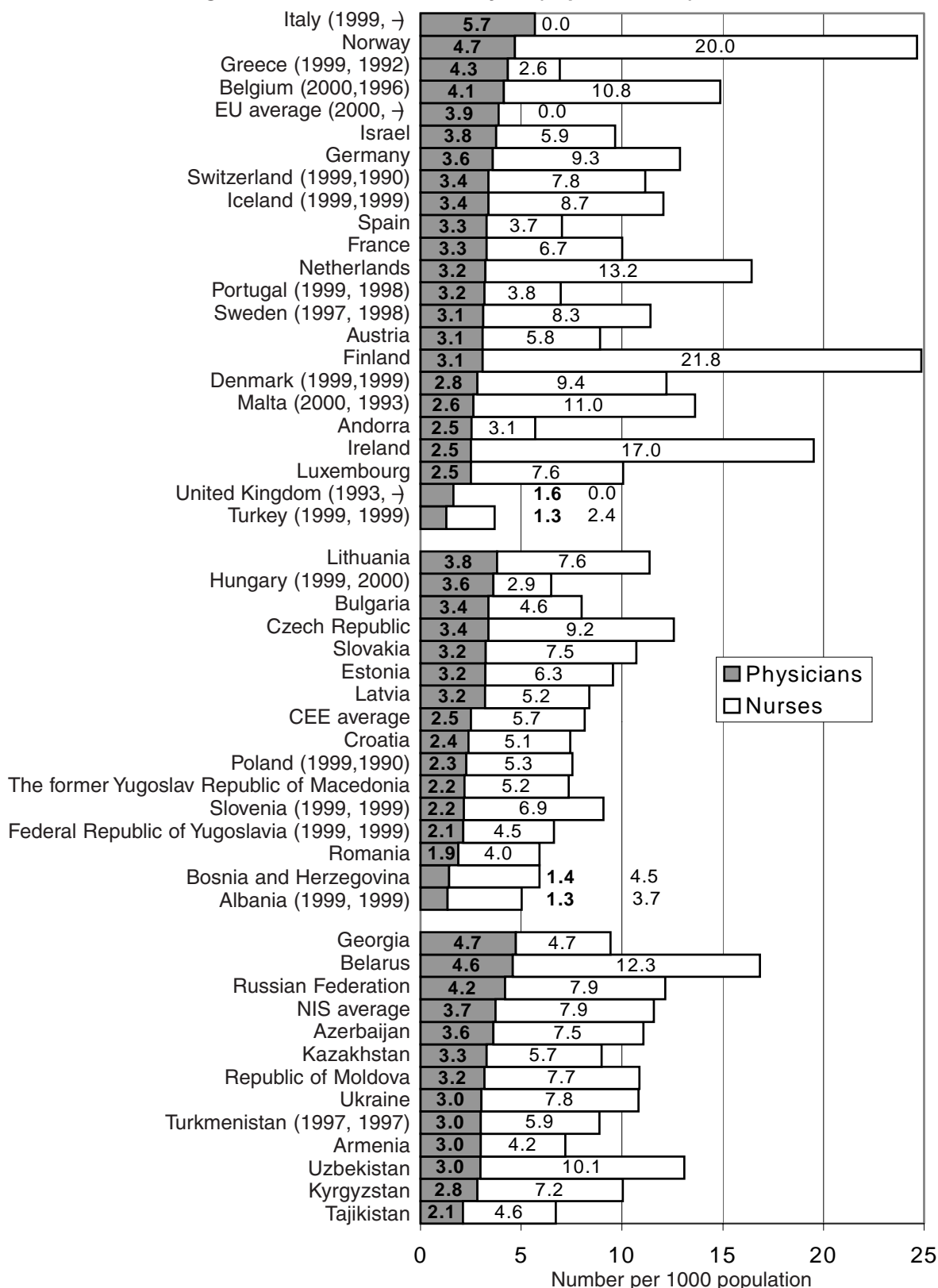
Fig. 16. Nurses per 1000 population in Bosnia and Herzegovina and selected countries^a



Source: WHO Regional Office for Europe health for all database.

Notes: ^a EU average data is not available. CEE: countries of central and eastern Europe; EU: European Union.

Fig. 17. Number of physicians and nurses per 1000 population in the WHO European Region, 2000 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

CEE: central and eastern Europe; EU: European Union; NIS: Newly independent states.

Bosnia and Herzegovina

The education of nurses in the Federation of Bosnia and Herzegovina lasts 4 years and can be taken in any of the 15 “middle level medical” schools. After completing one of these schools, nurses have the possibility of pursuing higher nursing education in Bihaè, Mostar or Sarajevo. Nurses who finish the middle school and are working are not allowed to continue their education at a higher medical school and are also not able to obtain credited continuing education.

There are current plans to reform education and training for all health professionals. This will be discussed later (in the section on “Health care reforms”).

Republika Srpska

In Republika Srpska, the graduate and postgraduate education of doctors, dentists and pharmacies is organized by the Ministry of Education and is held in two medical school faculties, two faculties of dentistry and one faculty of pharmacy, located at the University of Banja Luka and the University of Srpsko Sarajevo. The Ministry of Health does not have jurisdiction to decide the curriculum or the number of students admitted annually.

The curricula and syllabi are designed to cover 6 years of study, including both theoretical and practical courses. The faculty of pharmacy provides a 5-year education for undergraduates. Upon completion of the full training course, there is a mandatory 1-year residency (registration course) for newly graduated GPs and dentists, mostly at the primary health care level. Such “residents” are expected to take the professional state examination, whereby they are then authorized to perform medical duties independently as licensed GPs, or to continue their specialist training in a particular field of medicine/dental care/pharmacy. Specialized training programmes take 3–5 years, depending on the medical branch. Within health care reform, some new subjects will be included in the postgraduate curricula and syllabi, mostly oriented towards primary health care and prevention of diseases. One of these subjects is family medicine training, in both undergraduate education (6th year) and in postgraduate courses.

Secondary school for nurses takes 4 years, and there is higher education organized in some centres in Republika Srpska. Higher education for nurses takes 4 years.

Current legislation does not prescribe periodic checks of skills and knowledge of health professionals; proposed regulatory legislation, however, includes compulsory periodic testing of the knowledge of all health professionals. As a part of this proposed legislation, medical/dental/pharmaceutical chambers will be in charge of this task. Chambers will also be

responsible for licensing or revoking licences of health professionals, based on the quality of their performance.

Pharmaceuticals and health care technology assessment

In general, Bosnia and Herzegovina does not have sufficient pharmaceutical manufacturing to cover its entire needs. This means that beyond the Bosnalijek factory and small-scale production in pharmacies and hospitals, most drugs have to be imported.

Pharmaceutical supply during the war and postwar period (1992–2000) was mostly channelled through humanitarian aid programmes, covering up to 70% of supplies – according to some estimates. In a large number of cases, this heavily influenced the choice of therapy, which often depended on the kind and quantity of drugs available, as well as on clinical judgement. The Health Insurance Funds have never had proper guidelines or control over hospital drug expenditures. There is no purchase of hospital packs, a practice that is extremely expensive; but in the hospital's perspective this practice may be convenient – as no effort at efficiency seems to be needed. Also, there appears to have been no incentives for hospitals to implement cost-effective procurement procedures in any area.

Furthermore, criteria other than local needs often determined pharmaceutical contributions. The main humanitarian agencies, donors and private individuals often based deliveries upon their own estimations and stocks, and their standard emergency guidelines, which were not based on local needs and requirements. As a consequence, wastefully large amounts of drugs were provided, especially those exceeding expiration date, or they did not correspond to current needs in any respect (for example, antimalarial drugs and long-abandoned sulphonamide). WHO estimates that there are still 600 metric tons of drugs in the Federation of Bosnia and Herzegovina and 100 more metric tons of unused drugs stored in Republika Srpska – a problem in need of an urgent solution.¹⁹

The heavy dependence on humanitarian assistance for pharmaceuticals has diminished in recent years, but legal regulations and financial and technical solutions for fulfilling this and similar jobs are still needed. An Institute for Quality Control of Medicines (IQCM) has now been created in both entities under an explicit single perspective for the entire country. The major part of IQCM is based in Sarajevo and is mainly equipped for standard physical,

¹⁹ World Health Organization guidelines for safe disposal of unwanted pharmaceuticals in and after emergencies. Geneva, WHO, 1999.

chemical and microbiological analyses; a complementary part of the Institute laboratory is being established in Banja Luka (Republika Srpska) for biological and biochemical analyses.

The current system fragmentation drains scarce public resources at the expense of necessary health care services to the population and also forces pharmaceutical unit prices up, because of low purchasing volumes. This affects the procurement of drugs and equipment, in particular, as well as secondary and tertiary services. For example, in the present situation, there are 13 purchasers (10 cantons + the Federation of Bosnia and Herzegovina + Republika Srpska + Brčko District) of drugs. In 1998, WHO studied the pricing of specific drugs inside Bosnia and Herzegovina and found that the best local offer was more than double that obtained on the international market.

Concerning medical technologies and technology assessment, health care facilities were very unevenly equipped before the war, with more investment made on hospitals than on primary care; nor was there any experience in assessing medical technologies or planning, regulating, managing, purchasing or using equipment and technologies appropriately. Before the war, no systematic policy (or skills) existed for the regular updating, maintenance and replacement of medical equipment. Together with low capital investment for new equipment, this led to a critical situation, where much of the equipment was either outdated or out of use – even before 1992. Due to the lack of maintenance and replacement of equipment and due to the devastation during the war, it is estimated that up to 40% of current equipment may be out of use. Efforts to tackle the lack of previous experience in medical technology assessment are emerging; there are signs that the current situation is under review while experiences from other countries are taken into account, particularly in terms of informing procurement of new equipment. Recently, the World Bank's Basic Health Project has begun supporting the early stages of strategic planning and program development for quality improvement in health care. Initial activities have focused on the formulation of enabling legislation, regulations, and policies for the establishment and functioning of agencies for accreditation and quality assurances in both Entities.

Federation of Bosnia and Herzegovina

The Federal Ministry of Health (the then Ministry of Health of the Republic of Bosnia and Herzegovina) established a Department of Pharmacy during the war, a move that later proved to be very favourable for developing the entire pharmaceutical sector. The Ministry's Pharmaceutical Department has the following office and components: Assistant Minister for the Pharmaceutical Sector, Drug Registration, Supply and Production, and Narcotics.

With assistance from WHO and UNICEF, the Federation of Bosnia and Herzegovina introduced the Essential Drugs List (EDL) during the war. The present Federal EDL has 202 drugs. This list is a basis for the “positive list” established by each canton, which is a list of reimbursable drugs by cantonal insurance funds. The Federal Ministry of Health has since appointed a Commission on Drugs to advise the Minister of Health on such issues as marketing approval, the Essential Drug List and other relevant topics.

Article 64 of the Federal Law on Health Protection stipulates the following:

“A pharmacy is a health institution which ensures supplying of medicaments to population, medical institutions and health officers exercising private practice. Supply of medicaments referred to in this Law implies procurement, storing and delivering of ready made medicaments on the basis of prescriptions and without prescriptions, as well as making, testing and delivering of pharmaceutical products and preparations.”

The Law on Drugs, approved in the Federation in 2001 by the parliament is expected to regulate the overall work in the pharmaceutical sector in the Federation of Bosnia and Herzegovina. The Law on Narcotics is also envisaged as a state-level law; the OHR has provided support in its preparation.

Re-registration of drugs available on the market started immediately after the war. At present there are some 400 generic drugs and 700 brand name drugs registered in the Federation. The Federation of Bosnia and Herzegovina has produced three postwar editions of drug formulary (*Registar lijekova*), which provides information about all registered drugs: their use, producer and price. Displaying price in this formulary is also believed to be helpful for implementing rational drug prescription.

The Federal Ministry of Health has set margins: 10% for retail pharmacy and 20% for wholesalers. Despite this, a serious problem with drug procurement in the Federation of Bosnia and Herzegovina is that it is the cantons that are entitled to procure and reimburse drugs. There are two issues here: (1) inefficient procurement, because of the large number of purchasers (no economy of scale) and (2) inequity among canton populations in access to drugs if (as is the case) different resource bases exist. Determination of referral prices of drugs is also left to cantons.

Unfortunately, cantonal insurance funds cannot currently meet the demand for drugs, so people have to pay for many drugs out of pocket, as drugs are available but prices exceed the ability of many to pay. Also, the capacity of cantons to inspect and reinforce legislation is very limited, and this is seen as a major problem in the pharmaceutical sector in the Federation of Bosnia and Herzegovina. So far, no Federal inspector has been appointed.

Whereas private pharmacies abound, a major problem is the lack of hospital pharmacists; only a few pharmacists run the hospital pharmacy. This is seen as one of the major shortcomings of managing pharmaceutical supply through hospitals.

Republika Srpska

Registration, quality control and inspection improved considerably in 1997, when Republika Srpska introduced the List of Essential Drugs (220 drugs) based on the WHO Essential Drug Programme. As a result, only registered drugs can be imported and distributed in Republika Srpska. The list of drugs was adjusted to current needs, whereas the range of drugs supplied through humanitarian aid was very restricted and directed towards cheaper groups of drugs. Moreover, this list provides a framework to define the primary health care positive drug list to be reimbursed by the Health Insurance Fund.

The pharmaceutical regulation sector infrastructure was also recently extended to include the following office and components: Assistant Minister for Pharmaceuticals, Drug Registration, Supply and Distribution (including narcotics) and Pharmaceutical Inspection. Also, the Minister of Health has appointed the Drug Evaluation Committee to evaluate registration documentation. Since 1998, a new drug registration procedure has been introduced. At present, there are some 700 generic drugs and 1300 brand name drugs registered in Republika Srpska.

The second revision of the essential drug list was done in collaboration with WHO, and *The essential drugs of the Republika Srpska* manual was published in collaboration with UNICEF in 1999. This manual has been distributed to health professionals and is used as a basis for promoting rational prescription.

The new drug law, developed in collaboration with the PHARE programme, is in full harmony with EU directives (as well as with the drug law from the Federation of Bosnia and Herzegovina) and was approved by the Republika Srpska parliament in May 2001.

Regarding distribution, pharmacies supply medical substances to the population and health institutions, and provide instruction for their proper use. They are obliged to keep in stock a sufficient quantity of drugs listed on the essential drug list of Republika Srpska. As can be seen in Table 10, the number of pharmacies and wholesalers has significantly increased in a last few years, mostly in the private sector.

Drug prices in Republika Srpska are regulated by the *Regulation on pricing for pharmaceuticals*, which differs for drugs that are to be paid by the Health Insurance Fund (drugs listed on the cantonal positive list) and other prescription

Table 10. Number of wholesalers and pharmacies (state and private) and pharmacists in Republika Srpska, in 1996 and 2000

Group	Ownership	1996	2000
Wholesalers			
	State	4	7
	Private	8	48
	Total	12	55
Pharmacies			
	State	51	55
	Private	31	138
	Total	82	193
Pharmacists		135	215

drugs not on the positive list – for example, over-the-counter (OTC) drugs. Current drug margins are based on a 20% mark-up for pharmacies and 8.2% for wholesalers, an arrangement that encourages the sale of higher priced products. Health insurance fund financed drugs are priced without wholesale and retail margins and without taxes (wholesalers and pharmacies are not paid for supplying these drugs), but include a fund service fee. Prices for other prescription drugs not on the Health Insurance Fund’s positive list and for OTC drugs do contain margins; in addition, wholesalers and pharmacies can claim related expenses that are not included in their mark-ups.

The Health Insurance Fund covers drugs provided in outpatient and hospital care. State pharmacies are reimbursed for positive list drugs they dispense; private pharmacies, however, are excluded from the reimbursement system by the Fund. This reimbursement system is based on a reference price list based on the prices of the 10 largest wholesalers. The average price list of each brand/position results in the invoice price.

Drugs used in hospitals are included in a “hospital-day treatment”, and reimbursed by the Health Insurance Fund. If the drugs are not provided in the hospital, patients can send an invoice of their purchase in a retail pharmacy to the Fund and get refunded. There are, however, no hospital guidelines or hospital drug lists used, so that the Fund has no control function over hospital drug expenditures and cannot purchase hospital packs. This practice is expensive (for the Health Insurance Fund), convenient for the hospitals (no incentives seem to exist for hospitals to implement cost-effective procurement procedures), and inconvenient for the patients (who need to search for cheaper drugs in retail pharmacies). As in the Federation of Bosnia and Herzegovina, the lack of pharmacists in hospitals is also a problem.

Financial resource allocation

Third-party budget setting and resource allocation

Before the war, each “self-management community of interest” decided on the fraction of the gross domestic product to be allocated to health care at the macrolevel; the resources collected were then allocated to health institutions. Allocation decisions were mainly based on input criteria, such as installed capacity, number and qualifications of employees, equipment levels, and running costs. These allocation practices did not motivate managers to manage efficiently, since resources would flow irrespective of any efficiency criteria.

The same applies to health professional payments, where flat salaries – irrespective of health professional performance – was the rule; this led to arguable practices, such as undeclared “moonlighting”, under-the-table payments and irregular waiting lists queue jumping.

Right after the war, rationing was the answer to the severe insufficiency of resources that followed. Specialized care has usually benefited from this practice at the expense of primary health care. After some years in which no explicit rationing rules were applied and decisions regarding the distribution of resources remained discretionary, contracts are being introduced. In the last few years, the Ministry of Health are trying, through their own initiative and with support from WHO and the World Bank credit activities, to produce platforms for prioritizing investments.

Federation of Bosnia and Herzegovina

The managing boards of the cantonal insurance institutes are requested to draw up an annual financial plan based on the projected needs of the compulsory health insurance system, which is approved by the cantonal legislative body. Although the health care budgets are almost entirely financed by health insurance contributions, a small, symbolic set of funds are released from the municipal budgets and added to the compulsory insurance system. Resources are then allocated to service delivery institutions (see below).

Republika Srpska

The 1999 Law on Health Insurance stipulates that the Republika Srpska's Health Insurance Fund estimates its probability to collect contributions and, accordingly, proposes to the Health Insurance Fund Assembly the rates for each major group of insurees. The Republika Srpska government determines at the beginning of the year the rates for the current year and has the right to change those rates, if needed. Thus, there is no rigid calculation of the size of the overall health care budget. Parliament later adopts the contribution rate (currently 15%), based on the government proposal.

The Fund's financial plan allocates funds to each level of care and to different programmes, but decisions on funding according to geographical areas depend on the actual contribution collection in each area. The Fund keeps 20% of all collected resources for its operational costs and for solidarity redistribution. Data, however, is lacking on the share of this 20% used for redistribution of funds between regions.

Federation of Bosnia and Herzegovina

Although there are plans to change the system, most resource allocation to hospitals is still based on input-related historical budgets.

Calculations vary from canton to canton, but the formula is more or less the following: the national pay scale is multiplied by a coefficient (set by the Managing Board of the cantonal Fund) that in turn depends on education, years spent in service and position in the workforce. This is calculated for each facility employee, thus giving an amount for salaries. Taxes and other figures are added to this amount, and this gives the total amount for each facility. As an allowance for material expenses, 40–60% of the total amount of money allotted for salaries is added to the budget in hospital care (20% in primary care premises).

The Cantonal health insurance funds plan budgets based on a historical budget, but it is very unclear what the relationship is to the real amount of

money transferred to hospitals (which use the mechanism described above). Thus, hospital budgets remain directly linked to the number of employees, rather than to the amount and quality of services delivered. In general, no money is earmarked for allocation in either case for amortization and maintenance of equipment and for facilities and capital costs. This leads eventually to short-term exploitation of available equipment and facilities.

Republika Srpska

For a number of years after the war, a fee-for-service payment system was used in Republika Srpska as the main method of financing. Because the system had no fixed references or payment ceilings, it nearly bankrupted the Health Insurance Fund in the year 2000. The burden was then transferred to the providers, seriously affecting the quality of provision, since the contractual agreements do not guarantee payment, regardless of whether a clinical service has been delivered or not, there have been increased referrals to higher levels of care.

There is now a basic contract between the Health Insurance Fund and service providers, including a price list to determine the level of disbursements. The new price list (June 2001) is considered to be a realistic reflection of the cost of services. If services provided according to the contractual relationship are not reimbursed, the health institution has the right to sue the Fund. Invoices now serve as a monthly report of services purchased from the price list.

Although the Fund is trying to fulfil its contractual payment obligations (for example, 92% of the money was transferred to the health institutions in the first 6 months of 2001), contract imperfections are not rare. For example, there is a lack of discipline and monitoring capacity and quality, which causes deterioration in quality and cost containment. Uneven control of invoices makes it possible for some frauds to go unpunished. Also, actual payments cover only portions of the invoices, so hospital debts are widespread. For many, the system is not broken yet, due only to the ethical and professional attitudes of medical staff and to patient resilience. All of this undermines possible incentives coming from contracts.

Payment of physicians

As before the war in the public sector, salaries are still the predominant (if not the only) formal provider payment system; fees for services have never been important as a provider payment system in Bosnia and Herzegovina. Changes

in the provider payment mechanism are now expected to ensure better system performance and improved geographical equity. In private facilities, the fee-for-service method of provider payment is used almost without exception.

Under-the-table payments in the system have not been officially analysed, but they are assumed to be substantial in both entities. A household study by the Know How Fund revealed that most citizens pay directly to their providers in many publicly owned service delivery facilities.

Federation of Bosnia and Herzegovina

Salaries of public providers are determined by multiplying a national pay scale by a coefficient linked to education, position and number of years in service. The payment system in the public sector thus stimulates providers to pursue more education and higher positions rather than to deliver an appropriate volume and high quality of service.

Private providers charge their patients directly. No regulation and monitoring of prices and incomes exist in the private sector, under the assumption that a private practice is “paralegal”. Although evidence is anecdotal, a serious degree of supplier-induced demand is assumed to exist.

Republika Srpska

According to the current collective agreement, physicians get paid a fixed amount for their time at work. Marginal differences in salary level are directly related to the type of institution for which the physician works and to their personal academic and professional degree. Licensing of physicians by the Medical Chamber began in 2002.

The salary levels for GPs are just above the average salary in Republika Srpska, while specialists are able to earn around twice as much. This situation is believed to perpetuate the picture of incompetent GPs, too many specialists, low confidence in primary health care and increased health care costs.

Conclusions

After reviewing the organizational structure and financing mechanisms of Bosnia and Herzegovina in the present chapter, a few comments must be made before entering the next chapter.

The organizational architecture of the system results in a very expensive health care system, due to the ensuing financial and other institutional costs of 13 health ministries and health insurance funds. The country spends in total, a

high percentage of its GDP on health care (taking into account public and private sources), while serious problems remain. A key problem is equity, in both geographical access and finance. According to a recent World Bank survey,²⁰ “Rural residents complain about the poor conditions of roads and lack of access to health facilities – basic health care is available to only 28% of rural people surveyed, and only 13% have a pharmacy nearby”. At the same time, the survey revealed that: “Health care is the leading priority for many participants in our survey. People complain about health care facilities lacking equipment and the lack of qualified doctors and nurses. Drugs are available and their price exceeds the capacity of many to pay. Bribes are needed to bypass waiting lists in order to get better treatment.” Another World Bank document states:²¹ “There appears to be considerable scope for strengthening health service financing and provision in Republika Srpska. Over 73% of households perceive that fundamental change is required to improve [the] health sector.” The same type of document is produced for the Federation, although no precise figure is provided.

With respect to equitable finance, a two-tiered health care system is being created: one private (for wealthy people) and one public (for the rest of the population). There is a widespread belief that private facilities are offering services of higher quality; while this may be true, there is no evidence showing that the quality of clinical services should be higher when the same providers work in public and private facilities. Although all private facilities operate on a full out-of-pocket payment basis (prepaid private insurance is non-existent), government has yet to develop proper regulation of the private sector. In addition, government has not regulated dual employment, and there is an indication that publicly paid time and facilities are being used for the treatment of private patients, although no documented evidence to prove this statement exists.

Finally, high unemployment, inadequate payment and low staff morale contribute to the proliferation of so-called under-the-table payments. The result of all of these shortcomings, according to a Council of Ministers document,²² is that 40% of health care expenditures in the country are at this moment used to pay for drugs and “gratitude” payments to service providers, with citizens carrying the bulk of this burden.

²⁰ *A social assessment of Bosnia and Herzegovina*. Washington, DC, The World Bank, 1999.

²¹ *Household perceptions of health care in the Republika Srpska of Bosnia and Herzegovina: health expenditures and perceptions survey*. Banja Luka, World Bank, 1999.

²² *Entrepreneurial society, Bosnia and Herzegovina economic development strategy global framework 2000-2004*. Sarajevo, Council of Ministers, Ministry of Foreign Trade and Economic Relations, 2000.

Health care reforms

Aims and objectives

The last several years have seen the beginnings of wide-ranging reforms in the health sector, covering the scope, financing, costing, organization, and management of health care services. Today, reform in the health sector is more advanced than in the other social sectors. Nevertheless, the share of health spending in GDP remains unusually high which, along with the prevailing weaknesses in the efficiency, equity and quality of the health services, calls for deeper reforms, if financial sustainability is to be restored to the sector. As with the other social sectors, the most important challenge is to modernize health services, while reintegrating the system so as to allow better exploitation of economies of scale in the delivery, financing, and administration of health care in Bosnia and Herzegovina.

As mentioned previously, the health system in Bosnia and Herzegovina was already under strain when the country became independent (1992), and then war (1992–1995) destroyed about 30% of the country's health facilities and caused the loss of 30% of practising health professionals. The Dayton Agreement gave the responsibility for health care organization, finance, and delivery to each entity, and in 1997 the Bosnia and Herzegovina governments endorsed their health law(s) that certified the separation of the country's health system into two autonomous systems.

Throughout these years, it was obvious that a massive effort would be needed to put the newborn health systems on a feasible track. At the same time, the public's request for health system "improvement" was voiced in the last public opinion survey on the health care system. The population surveyed expressed a large degree of dissatisfaction: between 55% and 73% expressed the view

that health care services required “complete reorganization”. Delineating the conceptual and operational differences between *health system reform* and *health system reconstruction* and their respective aims and objectives proved almost impossible, however.

Western donors have contributed large amounts of funding to rebuilding systems. For a start, the United Nations family of organizations contributed substantial direct support; in addition, the World Bank contributed millions of dollars in grants and loans. Also, the PHARE programme has made heavy investments in equipment and technical assistance to the public health institutes at the entity and cantonal (Federation of Bosnia and Herzegovina)/regional (Republika Srpska) level and has provided scholarships and “study tours”, as other bilateral donors have also done.

This support, however, has not been free of contentious side effects. As frequently denounced in the media – in the context of a culture of arbitrariness, ethnic tensions and lack of proper law enforcing structures – Western aid seems to have triggered a “rent-seeking” donor culture and a foreign aid dependency among politicians and professionals. The huge health system administration seems to hide vested interests and a plethora of candidates competing for the use of donor funds. Among other things, examples abound of donor agencies paying several times for the same document and of nationals playing with versions of a document, (see also below the section on “Reform implementation”).

On the positive side, much effort has been devoted to developing a family doctor system that can be integrated at the community level in Bosnia and Herzegovina. It is anticipated that such a system will not only ensure adequate primary care in communities, but will also practise effective gatekeeping for referrals to specialists. Moreover, hospitals will have stronger incentives to perform. Plans and activities for reforming the pharmaceutical sector are also on their way; these plans are almost identical in both entities. Comprehensive programmes funded through international donations are intended to make public offices more efficient at enforcing laws, including all health-related aspects of them.

Federation of Bosnia and Herzegovina

Reform of health care organization

In 1994, the Federation health ministry initiated a process of health care reorganization. In the initial phase, it focused on health care system reconstruction, including war victim rehabilitation, and on the definition of

essential hospital services, primary health care and public health services. In 1997, the World Bank-sponsored Essential Hospital Service Project was launched; the aim of the project was to strengthen essential hospital services in three referral clinical centres and eight cantonal hospitals in the Federation of Bosnia and Herzegovina. The project had four components: essential hospital construction work; medical equipment and drugs; continuous staff education; and health financing reform.

With support from the WHO Regional Office for Europe, World Bank and PHARE the Federation of Bosnia and Herzegovina Strategic Health System Plan was developed in 1998. The plan sets out the policy directions for reform, reconstruction and development of the health system in the Federation and states a number of goals, such as higher system sustainability, equity and solidarity, efficiency, satisfaction of health workers and patients, and local ownership. The plan proposed a number of measures in many functional areas and also proposed three levels of intervention: the Federal level, the cantonal level and the institutional level. In the field of health system law and regulation, the main objectives were:

- to set up an appropriate system of decentralization between the Federation and the cantons;
- to develop a “basic package” of services accessible to all and funded via compulsory insurance;
- to foster pluralism of health care institution ownership; and
- to resolve a balance between the rights and duties of citizens and professionals.

The recent World Bank-sponsored Basic Health Project (for a total of US \$12 million) is another key development in the fields of primary health care, public health and disease control.

Health care finance reform

Given the depth of the health system crisis that ensued after the war, serious consideration has been made to revamp health financing in the Federation of Bosnia and Herzegovina. A decision has been made, however, to continue with health financing based on the Bismarckian model – a mandatory health insurance system whereby contributions are collected and risks pooled. This system will continue to be used as long as it serves as an asset in sustaining health finance. The aims in the area of health system financing were stated as:

- pooling resources within a compulsory insurance in order to offer a package of basic health services for all;

- ensuring resource protection by earmarking funds;
- introducing supplementary health insurance on a voluntary basis; and
- introducing further complementary forms of finance, such as budget supplements, donations and co-payments.

In the field of resource allocation, a number of objectives and measures are proposed, including a new method of funding providers based on contracts between providers and the Health Insurance Funds; and a shift from a salary-based system for health professionals to a mixed system of capitation, fee-for-service and performance-related pay.

Reform of the health care delivery system

Primary care

Primary health care system reform focuses on allowing greater freedom of choice to patients, strengthening continuity of care, establishing an effective gatekeeping system of primary care providers and renovating the primary health care infrastructure. An emphasis is put on family medicine teams, as opposed to individual medical practices; on retraining and specialization; and on education. The family medicine team will be responsible for a certain number of families.

It is also proposed that the *Dom zdravljas* should be subject to profound reorganization. Rehabilitation will also move away from hospital care and will become part of smaller facilities.

The Law on Health Protection allowed privatization of primary health care facilities, but privatization of hospitals or other specialized institutions has not been considered on a massive scale.

Hospitals

Reform of hospitals and specialized institutions will be based on a number of factors: a more effective referral system; new management mechanisms that are better fit to face the introduction of contracting; and the definition of essential hospital services to be covered under health insurance. The basic benefit package is also considered as a potential tool to assist health service planning in the future. Also, a so-called network of health care institutions will be defined.

Management and organization

Further plans are directed towards the reform of the health information system for dental care and pharmaceuticals, with an emphasis on legislation, drug financing and pricing, supply, rational prescription and information, as well as on good pharmacy practice. As the government does not oversee the quality of services delivered in private facilities, private providers are not incorporated in the general health information systems of the country, so data from this sector are virtually non-existent.

The previously-mentioned lack of knowledge in the basic principles of modern health care management may be improved with the immediate establishment of the Centre for Health Care Management, a World Bank supported project.

Republika Srpska

Reform of health care organization

The WHO Regional Office for Europe-supported Strategic Plan for Health Care Reform and Reconstruction in Republika Srpska 1997–2000 was approved by the parliament in 1997. A joint Ministry of Health and PHARE Expert Group on Health Financing Reform followed in 1999.

The 1997 Strategic Plan defines the following objectives:

- reconstructing the public health network according to a three-tier model;
- providing adequate education and training to public health staff;
- establishing a management training course at the Public Health Institute of Republika Srpska in Banja Luka; and
- improving the health information and statistical abilities of the public health system.

A new, more open environment is now expected to further stimulate plans for improving health system planning and the regulatory functions, including: setting up a drug agency for drug registration and accreditation; developing sub-laws in order to regulate capital investments; initiating registration and licensing of health personnel following the adoption of a law on medical chambers; and setting up accreditation procedures for both public and private hospitals.

As an area with specific complexities, the government is developing regulations and social programmes in order to enable institutions to cope with

surplus staff. The Health Insurance Fund is likely to start providing incentives for health providers who will join such social schemes. The introduction of health management, quality control, a formulation of legislation on private provision of health care and the Law on [a] Chamber of Physicians should also induce improvements in this area.

Health care finance reform

The Republika Srpska decided, as did the Federation of Bosnia and Herzegovina, to continue with the Bismarckian model of health financing. Reform is taking place in the area of provider payment schemes, which are undergoing reform towards negotiated prospective budgets. The process of negotiating contracts aims at realistically calculating the cost of services and transferring them in per-person terms to primary health care and in terms of volume of bed-days to hospitals, and also in incorporating these estimated costs in their accreditation status and the newly published network of health institutions. Preparations for the new contract will be done each year so that it can be signed before January of the year concerned. Information system strengthening and training in health management are seen as key priorities in improving hospital management. This should help to further refine contracts, thus creating realistic weights for per-person reimbursements and mixed payment formulas

Reform of the health care delivery system

The Ministry of Health aims to: increase the focus on cost-effective interventions; strengthen the gatekeeping role of the family practitioner; introduce an appointment system; maintain the patient's freedom to choose a family practitioner; and improve the continuity and coordination of care between primary, secondary and tertiary care. The family medicine doctor is expected to become the real first-point of contact for patients. There is also increasing interest in clinical practice guidelines and methods used in evidence-based medicine.

Recent changes in regulations and an introduction of per-person reimbursement will enable primary health care directors to precisely contract medical services with GPs. Directors of hospitals will also be able to decentralize budgets and responsibilities to hospital departments. Such decentralization should increase the pressure on under performing health professionals.

A new drug policy is under preparation. It states that registration, quality control and inspection (the main subcomponents of the drug quality assurance

system) will be under an independent agency for quality assurance. Pharmaceutical inspection, traditionally linked to sanitary inspection, will now be reorganized and transferred to the pharmaceutical sector, under the supervision of the Drug Agency. Their main activities should be based on the good manufacturing practice, good laboratory practice and other internationally accepted standards.

Distribution centres for centralized drug procurement have also been set up, and now drugs are supplied on the basis of need, from strictly defined distributors and manufacturers of certified quality. A proposal already exists for creating two logistic centres in the eastern and western part of Republika Srpska for the state pharmacy sector. At the end of 2000, a first short drug registration phase was completed, based on minimum documentation requirements. In 2001, some 80 different manufactures from all over the Balkan region and Europe applied for registration for more than 2000 medicinal products, and a drug policy is under preparation.

Content of reforms and legislation

Federation of Bosnia and Herzegovina

As a part of the reform process, mention must be made of the 1994 Federation Health Programme. Strictly speaking the Programme was not a proper law, but instead was a set of proposals by the Ministry of Health. It consisted of five components: health care system reform, manpower development, planning of physical infrastructure, public health programmes, and rehabilitation of war victims. Two new laws (the Law on Health Care and the Law on Health Insurance) were then prepared and adopted by the Federation parliament in 1997 to pave the way for reform.

The Law on Health Care covered most of the issues related to reforming health service delivery in the Federation of Bosnia and Herzegovina, with an emphasis on introducing the family medicine model. The Law on Health Insurance provides that each insured person is entitled to the basic benefit package of health services, regardless of personal resources and of the available resources within a canton. Box 4 provides the complete list of Federation of Bosnia and Herzegovina regulation acts relevant to health system reform.

Box 4. List of health reform legislation in the Federation of Bosnia and Herzegovina

- Law on Health Care (*Official Gazette of the Republic of Bosnia and Herzegovina*, 29/97)
- Law on Health Insurance (*Official Gazette of the Republic of Bosnia and Herzegovina*, 30/97)
- Instruction on the Content and the Form of Health Insurance Card (*Official Gazette of the Republic of Bosnia and Herzegovina*, 30/97)
- Instruction on the Method on Registration and Deregistration of the Insured Person to/from Obligatory Insurance (*Official Gazette of the Republic of Bosnia and Herzegovina*, 11/00)
- Decision on Determination of Temporary Standards and Norms of Health Care from Compulsory Health Insurance (*Official Gazette of the Republic of Bosnia and Herzegovina*, 21/00)
- Decision on Accepting the List of Essential Drugs Applied at the Territory of the Federation [of Bosnia and Herzegovina] (*Official Gazette of the Republic of Bosnia and Herzegovina*, 28/00)
- Law on Contributions (*Official Gazette of the Republic of Bosnia and Herzegovina*, 35/98 and 54/00)
- Instruction on the Method of Calculation and Payment of Contributions (*Official Gazette of the Republic of Bosnia and Herzegovina*, 37/98, 49/98 and 55/00)
- Decree on Paying Contributions for Persons Employed for the First Time (*Official Gazette of the Republic of Bosnia and Herzegovina*, 48/00)
- Law on Social Welfare, Protection of Civilian Victims of War and Protection of Families with Children; *Official Gazette of the Republic of Bosnia and Herzegovina* (3/6/99)
- Decision Imposing the Law on the Job Placement and Social Security of Unemployed (imposed by the High Representative's decision; *Official Gazette of the Republic of Bosnia and Herzegovina*, 5/5/00)
- Law on Protection of Persons with Mental Disorders; *Official Gazette of the Republic of Bosnia and Herzegovina* (3/7/01).

Republika Srpska

A substantial amount of legislative work has been carried out in Republika Srpska since the end of the war. The Law on Health Care was developed by the Republika Srpska's Ministry of Health, followed by the Law on Health Insurance. Specific mention must be also made of the documents *Health policy targets and measures in Republika Srpska by the year 2020* and *Basic health benefit package*, prepared by the Ministry in the year 2000.

Legislative work in the field of pharmaceuticals deserves specific attention. The Law on Drugs, in effect in Republika Srpska until recently, was developed in 1993 and is based on the Law on Drugs of the former Yugoslavia. In 1999, however, the Ministry of Health and Social Welfare appointed an expert group with the mandate to create a new law, in compliance with EU directives and produced in close collaboration with the PHARE programme. The Republika

Srpska National Assembly has now adopted the new law. Box 5 provides a summary of health reforms in Republika Srpska.

Box 5. Summary list of health reform legislation in Republika Srpska

- Strategy for Health Care Development in Republika Srpska by the Year 2000
- Strategic Plan for Health Care Reform and Reconstruction in Republic of Srpska 1997-2000
- Law on Health Care 1999
- Law on Health Insurance 1999
- Law on Medical Chambers 2001
- Law on Ionising Radiation 2001
- Law on Drugs 2001
- Amendments on the Laws on Health Care and Health Insurance 2001
- Decision on Network of Health Institutions 2001
- Health Policy Targets and Measures in Republic of Srpska by the Year 2020, in process of preparation for adoption by the parliament
- Law on Health Safety of Nutrition Products or Food Safety (in preparation).

Reform implementation

Health system reform implementation in Bosnia and Herzegovina can be fairly described as a “mixed picture”, which reflects the situation in the country in recent years. Newspapers and policy analysts usually describe the following events as *positive elements*.

- Since the end of the war, the economy has been recovering and privatization is underway. Economic development is therefore expected to get a further boost.
- Social inter-ethnic life is openly improving, some refugees are returning and conflicts are not spread out; and
- New governments are showing more readiness to cooperate in both entities, and some local politicians are showing a better, more responsible attitude.

Describing the health system in more precise terms, one document under the World Bank-funded Second Public Finance Structural Adjustment Credit (PFSAC II) Project included a macroeconomic formula for Health Insurance Fund resource allocation, so that 40% of resources would go for primary care and 60% for secondary and tertiary care. Implementation was initiated in April 2001, together with primary health care contracts; a recent analysis shows

some 33% of resources allocated to primary health care, and the figure seems to be increasing. There are other success stories (for example, the establishment of Community-based Centres for Physical and Mental Rehabilitation).

Besides this, the following are considered to be *negative elements* of the current situation:

- the slow pace of change in key areas of the country's structure (for example, police and judiciary), as well as barriers to unhindered economic development (for example, delays in industrial privatization);
- with respect to health, attention has to be given to regulating private payments – while the ability to pay has increased in the last few years, the habit of evading payment has remained.

Despite the challenges, strides toward successful reform have been made. Since the signing of the Dayton agreement, health system financing in Bosnia and Herzegovina has evolved towards a functional social health insurance system. In both the Republika Srpska and the Federation's cantons, health insurance funds have been established. The funds are financed by a portion of the social contribution tax which is levied on payrolls. Collection of these contributions has been poor in both entities mainly because of: 1. the relatively narrow payroll base used to fund social insurance both due to the large informal sector and the non-inclusion of non-wage income in the tax base; 2. the government's inability to define a working tax base for the rural population; 3. under-collection from formal public and private enterprises; and 4. exemptions among large numbers of the population.

As discussed previously, the Federal Health Insurance Fund was established and Federal Solidarity has been introduced. In addition, an inter-entity and inter-cantonal agreement was signed in December 2001. Through this agreement, health services are guaranteed for the population at the place of residency regardless of where the source of contribution is. In practical terms, this means that a person can live in one entity, work in another, and still receive health services at the place of residency. This is particularly important to facilitate the return of refugees.

A number of efforts have taken place to improve the capacity building of health managers and staff to improve the understanding of the forces shaping health sector reform in the light of economic pressures and of the various options for health reform. These programmes have been largely funded by bilateral and multilateral donor or lending institutions. In addition, health management centres created under the World Bank's Basic Health Project will standardize management training and practices to create managers who can operate in any facility across the country. The training will be under the same curriculum

throughout the country. The significance of this is also that professors will be able to work in either entity.

Inefficiencies in provision of services.

Progress to date. Much effort has been devoted to developing a family doctor system that can be integrated at the community level in Bosnia and Herzegovina. It is anticipated that such system will not only ensure adequate primary care in communities, but also practice effective gatekeeping for specialist referrals. Hospitals will have stronger incentives to perform. Plans and activities for reforming the pharmaceutical sector are also on their way, almost identical in both entities. Comprehensive family medicine programmes funded by the World Bank and CIDA are intended to make public offices more efficient in law enforcement, including all health-related aspects.

Additionally, National Health Accounts (NHA) have been developed, which provide information about revenues, sources and application of funds and health expenditures. This is particularly important in a situation of fragmentation of the sector, duplication of services and an absence of overall financial policy for health. Through NHA, the authorities are in a position to make informed decisions about allocation of resources and overall sector policy.

Computerized financial/accounting information systems have been developed and piloted at the entity and cantonal levels with funding from the World Bank-financed Essential Hospital Services Project. However, there are still some problems with system implementation issues. Further development of information systems needed for efficient functioning of the health system and for efficiency-enhancing improvements still remain. Health insurance funds are still developing systems to track individual contribution histories and the care for which providers seek insurance reimbursements. Hospitals lack effective management information systems needed for systematic monitoring of resource use and case outcomes. Both are prerequisites for managing contracts that guarantee the delivery of specified levels of services within budget constraints.

Federation of Bosnia and Herzegovina

Reform implementation in the postwar period has focused mainly on rehabilitation and restructuring the health system, based on external financial assistance. The health ministry has implemented a series of projects in particular fields, such as war victim rehabilitation; essential hospital services, primary health care and public health.

In the meantime, the Strategic Health System Plan of the Federation of Bosnia and Herzegovina, developed in 1997/1998 with support from the WHO Regional Office for Europe, was publicly presented twice, but has not yet undergone parliamentary approval. Policy analysts claim that this is clearly linked to resistance by some political parties to allow funds to merge resources with those of different ethnic groups.

The Federal authorities and cantons have also had conflicts in coordination. One example of this is the Federation of Bosnia and Herzegovina network of health care institutions. The planning of such a primary care network should belong to the cantons, whereas the hospital network should be planned at the Federation level, subject to ratification by the Federal parliament; so far (October 2001), the Federation of Bosnia and Herzegovina network of health care institutions has not been approved. The content of the basic benefit package – considered as a potential tool to assist health services and budget planning in the future and expected to be carried out at the cantonal level – has not been addressed.

In 2000, cantonal health insurance funds were established, with assistance under the health finance reform “component” of the World Bank-financed Public Finance Sector Adjustment Credit II (PFSAC II). By directing the payroll contributions for health from cantonal budgets to the health insurance funds, the system aims at improving transparency and accountability in the management of resources. The Federal Health Insurance Fund was also established and 8% of the cantonal payroll-health tax revenues along with equivalent transfers from the federal budget are being assigned to it. The Federal Fund is to finance potentially catastrophic tertiary health services and selected expensive vertical services, such as haemodialysis. Both the coverage of Federal Fund services and the amount of cantonal contributions to the Federal Fund will be subject to annual review and revisions as necessary.

Federal Solidarity has been approved which will reduce duplication of services and enable movement of patients from one location to another to receive needed services where available. This reduces the fragmentation of services between cantons and along ethnic lines. In practical terms, it means that lower income cantons can not equally benefit from expensive interventions which before Solidarity could not be afforded. This has eliminated justification for ethnic-based risk pooling. As a result, in January 2002 the Croat inter-cantonal health insurance fund ceased to exist. Contributions are now paid into one single account per canton. In addition to a percentage from contributions for health from Federal Solidarity (8%), a decision was taken by Parliament to match this amount from general revenues, which will resolve the problem of lack of contributions by non-earners (pensions, unemployed, social cases, etc).

This decision by the Federal Parliament also presents an opportunity for equalization of health expenditures across the Federation.

Republika Srpska

Health system reform in Republika Srpska has also been slow and surrounded by tensions, in spite of massive support from the donor countries – especially before the change of government in 2000. Now the Ministry of Health and Social Welfare and the World Bank have jointly started to try to reduce the contribution collection problems of non-payment and inequity. The new government has started ensuring regular payments to the Health Insurance Fund for vulnerable groups and has taken extensive action to reduce waste in budget spending. The auditing and planning functions of the Fund have been revitalized, and a painful process of a capacity rebuilding in the planning and information technology departments has started. Full computerization of the Health Insurance Fund is also in progress, so that contribution collection can be monitored effectively. The Republika Srpska government has also started a massive campaign to reduce corruption, one of the major reasons for tax evasion. Developing the basic health benefit package methodology, its content and its costing is expected to help set explicit priorities.

According to the new organizational structure of the Ministry of Health and Social Welfare, a new “pharmaceutical sector” was established within the Ministry in early 2000. Major steps are being taken in drug regulation, registration, licensing, narcotics, and quality assurance. An operational plan has been drafted in collaboration with WHO and the PHARE programme.

It is expected that reorganization of the *Dom zdravljas* will allow specialized outpatient services to be provided on a larger scale by 2002, at the latest.

The Law on Medical Chambers has been adopted by the parliament, and before 2002 there will be a Health Insurance Fund Assembly where the executive board and the president will be appointed.

Summary of health reform initiatives

Much of health system reform in Bosnia Herzegovina has focused on the development of strategic plans and a comprehensive base for selective health care sectors. Although little operational progress has been achieved in terms of achieving health system change, operational planning achieved thus far has required great strides in political will to create and open doors for future reforms.

Several factors contribute to the difficulties experienced in implementing change. Health ministries, health insurance funds and health care providers have lacked the technical infrastructure and management capacity to implement

change in the short term. The weak development of the regulatory function at key levels has also proved to be a barrier to implementing strategic health system objectives in the medium and longer terms. In addition, the ministries of health do not have enough executive power to implement a number of pressing measures in their sector, such as the introduction of practical steps to increase the availability of essential drugs in hospitals. It is often the case that authority in Bosnia and Herzegovina cannot be clearly demarcated between local and central levels and that even where it is divided among central, regional/cantonal and local levels, there are difficulties making system-wide decisions. It is also a consequence of the Dayton Agreement that the country is operating two distinct health care systems. International technical cooperation and support for development has been very considerable financially, but has suffered from a lack of interagency coordination at the system level. Finally, operational planning for health system reform in the country is and has been impeded substantially by a lack of sufficient baseline information, for example, on available financial and human resources. On the other hand, Bosnia and Herzegovina has made notable progress in a number of fields such as in the availability of trained human resources, financial resources and institutional infrastructures in specific areas, such as the pharmaceutical sector and family medicine. Another example of progress is ongoing work to develop a regular forum between the health ministries of both entities, in order to coordinate reform implementation, for example, in the field of health promotion. This implies that the country has increased its potential for effective health care reform implementation along the strategic lines that it has already spelled out.

Conclusions

The health system reform experience in Bosnia and Herzegovina has been an interesting case study of reform and premature decentralization and has parallels to other recently dissolved states. Reform in Bosnia and Herzegovina has been a contradictory pairing of the best with the sub-optimal; it has combined innovative approaches with political resistance and enthusiasm with obstruction. If anything, the case of Bosnia and Herzegovina shows, in particular, how an excess of easy financing can also have negative influences on reform.

All in all, practical collaboration with governments and officers has not always been easy. Explicit mention needs to be made of areas where the continuing implementation of activities depended on money being released to local counterparts, and unnecessary postponements of implementation in spite of capacities have been abundant.

From this perspective, using the summary words of the previously mentioned 2001 UNHCR document:²³

It may be simply stated that the health care system in Bosnia and Herzegovina is not capable of meeting the needs of the country's population and that overall state of the health care system is worse than in 1992. More concerning, however, is the finding that persons suffering from many illness[es] that might be considered to be of only minimal hindrance to the leading of a "normal" life in a more developed country, may be at serious risk if required to seek treatment in Bosnia and Herzegovina. The non-availability of a number of treatments may be life-threatening in certain cases.

²³ *Health care in Bosnia and Herzegovina in the context of return of refugees and displaced persons.* Geneva, UNHCR, 2001.

An attitude of political resistances against change has also played its part. People with inherited lifetime jobs and income security have advised the government not to produce strong regulations that would enable more competitive incentives for employees in the public sector. Furthermore, for years in Republika Srpska, strong lobbies have blocked the introduction of a Chamber of Physicians and regulations for allowing private medical practice. Efforts to coordinate work between both entities in the health field, in particular, have faced insurmountable difficulties. As a consequence, health system reform has often made little progress in areas where improvement was perfectly feasible – meaning areas where money, knowledge, information, and human and other resources were available.

At the same time, however, the seeds have been sown for a much better health system. Many buildings and equipment have been renewed; information systems have improved significantly; and Bosnia and Herzegovina now enjoys the backbone of a professional administration in the health sector.

In spite of the enthusiasm shown in planning for the future, the international community is now requesting clear signals of a change of attitude and more transparent behaviour from local politicians. Better coordination between the new government and entities “at a state level” should also help reintegrate Bosnia and Herzegovina as a state that is able to function more effectively.

The idea of genuine bridgebuilding between entities, including a plan to establish a coordination body to work towards creating some general health system strategy in Bosnia and Herzegovina, would be particularly promising. Despite the urging of the international community that the time has come to reintegrate Bosnia and Herzegovina as a state that is able to function more effectively with inter-entity coordination in health; the entities have not yet begun collaboration on a unified health systems strategy for the entire country.

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