HEALTH CARE IN BOSNIA AND HERZEGOVINA
IN THE CONTEXT OF THE RETURN OF REFUGEES
AND DISPLACED PERSONS

Sarajevo, July 2001
Foreword and Acknowledgements

As returns to pre-war homes in Bosnia and Herzegovina (BiH) have continued to increase in number and rate over the last year, it has become apparent that there is a need to focus greater attention on those issues which may affect the long-term sustainability of these returns. These include employment discrimination, education, access to pension entitlements and to public services in general. The need to resolve the particular problems related to health care provision was underlined by the oft-noted observation that shortcomings in this sector predominantly affected those who were among the most vulnerable in Bosnian society. The Office of the United Nations High Commissioner for Refugees (UNHCR) in Sarajevo, in particular, has noted an increased demand from many sectors for improved and comprehensive information on the workings and quality of the health care system in Bosnia and Herzegovina.

With these considerations in mind, UNHCR is pleased to be able to publish this document, designed to provide a snapshot of the state of the health system in BiH at the end of 2000. We are confident that this study will be of use to those interested in supporting the sustainable return to their homes of origin of those persons from BiH who were displaced during the 1992 – 1995 conflict, and who remain in displacement, whether abroad or within the territory of BiH.

As can readily be appreciated, the importance of the availability of satisfactory health care in the place of origin as a factor facilitating return must not be underestimated. While the war itself exacerbated the scale and severity of the health problems facing the populations affected by the conflict, it should also be remembered that many of those displaced are elderly, and so are more likely to be in need of continued treatment following return to their homes.

Despite the evident need for medical care and treatment, however, it is also apparent from this report that the facilities and resources available as well as the various administrative and legal frameworks within which these are utilised, are not currently capable of meeting these requirements. This observation highlights the importance of encouraging and assisting those domestic bodies ultimately responsible for the provision of these essential services to the local population, in their efforts to reform the system of health care provision, in order not only to facilitate return, but also to enable the development of a health care system in BiH that would satisfactorily meet the needs of all citizens.

The information contained in the body of this study was compiled from a variety of sources during the period July-December 2000. The authors would like to express their gratitude for the efforts of the researchers, editors and respondents who provided information for, and who helped compile this document. I would particularly like to express my thanks for his work on this project to Gregor Markow MD, who, at very short notice, was able to gather, put together and provide a detailed analysis of a prodigious amount of medical data. Thanks are also due to those who so thoroughly researched, drafted, and edited this report, including Merita Ilazi MD, Indira Karovic, Snjezana Ausic, Sabina Cejovic, Rod Rastan, Scot Greenwood and Henry Lovat as well as to those professionals and others who were kind enough to share with us their knowledge and experience of the health care system in BiH.

May 2001

Werner Blatter
Chief of Mission, UNHCR Mission in Bosnia and Herzegovina
# Table of Contents

Foreword and Acknowledgements
Table of Contents
List of Abbreviations

Executive Summary

1. Introduction
2. Legislative and Institutional Frameworks
3. Obstacles to Proper Functioning of the Compulsory Health Insurance Scheme
4. Special Legal Provisions for Specific Categories of Persons
5. Detailed Legislative Review
6. Conclusion

Part II: Chronic Diseases and Other Conditions – Treatment and Follow-Up
1. Introduction
2. Short Description of Health Care Levels of BiH
3. General Problematic Aspects of Health Care Delivery in BiH
4. Availability of Imaging Diagnostics
5. Specific Diseases and Conditions, Care and Treatments
6. Pregnancy
7. Children’s Diseases
8. Infectious Diseases
9. First Aid and Emergency Medicine
10. Conclusion

Annexes
1. List of Relevant Laws and Regulations
2. References
3. A Note on Methodology Employed for Part II of this Study
4. Maps
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE</td>
<td>Angiotensin Converting Enzyme</td>
</tr>
<tr>
<td>AmB</td>
<td>Ambulanta</td>
</tr>
<tr>
<td>aPTT</td>
<td>activated Partial Thromboplastin Time</td>
</tr>
<tr>
<td>BiH</td>
<td>Bosnia and Herzegovina</td>
</tr>
<tr>
<td>BGA</td>
<td>Blood Gas Analysers</td>
</tr>
<tr>
<td>CEA</td>
<td>Chorioembryonic Antigen</td>
</tr>
<tr>
<td>CC</td>
<td>Clinical Centre</td>
</tr>
<tr>
<td>CI</td>
<td>Compulsory Insurance</td>
</tr>
<tr>
<td>CT</td>
<td>Computed Tomography</td>
</tr>
<tr>
<td>COPD</td>
<td>Chronic (Obstructive) Pulmonary Disease</td>
</tr>
<tr>
<td>DE</td>
<td>Derventa (RS Region Two)</td>
</tr>
<tr>
<td>DM</td>
<td>Diabetes Mellitus</td>
</tr>
<tr>
<td>DPs</td>
<td>Displaced Persons</td>
</tr>
<tr>
<td>DZ</td>
<td>Domovi Zdravlja</td>
</tr>
<tr>
<td>ECG</td>
<td>Echocardiography</td>
</tr>
<tr>
<td>EDL</td>
<td>Essential Drug List</td>
</tr>
<tr>
<td>ENT</td>
<td>Enterology</td>
</tr>
<tr>
<td>ERPC</td>
<td>Endoscopic Retrograde Pancreatol- Cholography</td>
</tr>
<tr>
<td>ESRD</td>
<td>End Stage Renal Disease</td>
</tr>
<tr>
<td>FBIH</td>
<td>Federation of Bosnia and Herzegovina</td>
</tr>
<tr>
<td>FOC</td>
<td>Free of Charge</td>
</tr>
<tr>
<td>FP</td>
<td>Full Price</td>
</tr>
<tr>
<td>FRY</td>
<td>Federal Republic of Yugoslavia</td>
</tr>
<tr>
<td>fT3</td>
<td>Free T3-triiodothyronine</td>
</tr>
<tr>
<td>fT4</td>
<td>Free T4-thyroid hormone</td>
</tr>
<tr>
<td>GH</td>
<td>General Hospital</td>
</tr>
<tr>
<td>GP</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>HCG</td>
<td>Human Chorionic Gonadotropin</td>
</tr>
<tr>
<td>HP</td>
<td>Hitna Pomoc</td>
</tr>
<tr>
<td>IDDM</td>
<td>Insulin Dependent Diabetes Mellitus</td>
</tr>
<tr>
<td>KM</td>
<td>Konvertible Mark</td>
</tr>
<tr>
<td>MHC</td>
<td>Mental Health Care</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MRI</td>
<td>Magnetic Resonance Imaging</td>
</tr>
<tr>
<td>NDA</td>
<td>No Data Available</td>
</tr>
<tr>
<td>NMRT</td>
<td>Nuclear Medicine and Radiation Therapy</td>
</tr>
<tr>
<td>PCP</td>
<td>Patient Cost Participation</td>
</tr>
<tr>
<td>PH</td>
<td>Farmacia</td>
</tr>
<tr>
<td>PL</td>
<td>Positive List</td>
</tr>
<tr>
<td>PM</td>
<td>Pacemaker</td>
</tr>
<tr>
<td>PSA</td>
<td>Prostatic Specific Antigen</td>
</tr>
<tr>
<td>PTSD</td>
<td>Post Traumatic Stress Disorder</td>
</tr>
<tr>
<td>RBC</td>
<td>Red Blood Cell Count</td>
</tr>
<tr>
<td>RS</td>
<td>Republika Srpska</td>
</tr>
<tr>
<td>SFOR</td>
<td>Stabilisation Force</td>
</tr>
<tr>
<td>SFRY</td>
<td>Socialist Federal Republic of Yugoslavia</td>
</tr>
<tr>
<td>TEE</td>
<td>Trans Esophageal Echocardiography</td>
</tr>
<tr>
<td>TSH</td>
<td>Thyroid Stimulating Hormone</td>
</tr>
<tr>
<td>UNHCR</td>
<td>UN High Commissioner for Refugees</td>
</tr>
<tr>
<td>US</td>
<td>Ultrasound</td>
</tr>
<tr>
<td>VI</td>
<td>Visegrad (RS Region Six)</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
</tr>
</tbody>
</table>
Executive Summary

The extent of health care provision in Bosnia and Herzegovina (BiH), and the range of treatment available is insufficient to meet the needs of the residents of the country. This situation results from a variety of considerations, including an overly complex legal and regulatory framework and a general lack of funds and basic resources. These problems are seriously compounded by the post-war situation in BiH which is marked by a difficult economic situation, continued and widespread population displacement and a lack of functioning infrastructure. Regardless of the difficulties faced in providing health care to the residents of the country, this study supports the conclusion that the level of health care currently provided is not only significantly lower than those available in other, more developed nations, but are also below the level provided in BiH prior to the conflict.

This analysis of the health care system in BiH is undertaken from two perspectives; one legal, the other medical. The legal analysis primarily consists of an examination of the legislative framework related to the provision of health care, the shortcomings of this framework, as well as of some of the difficulties involved in the implementation of existing legal provisions. The medical analysis details the actual facilities and range of treatment available for specific chronic diseases and other conditions, the quality of these treatments and the factors limiting the provision of appropriate care for these diseases and conditions.

The legislative and institutional framework for the provision of health care in BiH is complex. Prior to the conflict in BiH, a nation-wide health insurance scheme was in place. Following the conflict, a compulsory health insurance scheme was developed that depended on a number of health care insurance funds. Each of these funds operates within a supporting legislative framework that defines the coverage provided and divides responsibility for provision of health care services between different levels of government.

Constitutionally, health care is deemed to be an Entity, rather than a state-level competency. There are thus two basic compulsory health insurance schemes: one in the Federation of Bosnia and Herzegovina (the Federation), and another in the Republika Srpska (RS). There is also a scheme for Brcko District. The health care insurance scheme in the RS is highly centralised, whereas responsibility for the operation of health care insurance within the Federation has effectively been delegated to each of the ten Cantons. The very complexity of this arrangement has hindered the effective functioning of the health care system in BiH, and has resulted in the development of a system which should provide health insurance to all residents, but which in reality provides only nominal coverage for many residents of BiH.

Particular difficulties stemming from the complexity of the health-care system include the inability of the system to allow transfer of coverage from one location to another, non-payment of contributions into the health funds, and the absence of enter-Entity co-operation on health insurance issues. As a result of these difficulties, residents who are covered under the current system are often required to pay high prices for treatment and medication and generally experience difficulty in accessing proper health care.
When examining the health care system of BiH from a medical perspective it quickly becomes apparent that adequate medical care is often not available. This is due in part to the complexity of the insurance schemes, but from a medical point of view, it results primarily from the absence of proper facilities, equipment and medication, as well as from a lack of essential funds. These major shortcomings are exacerbated by transportation problems resulting from rugged topography and damaged infrastructure, as well as by the fact that the war seriously affected the health of much of the population, resulting in unforeseen increases in demand on health care providers. Given these considerations, it is evident that it may not be possible for patients with chronic diseases to obtain the necessary treatment in the territory of BiH. At the current levels of treatment, the lives of persons in need of medical treatment for chronic diseases or conditions, even if these would not ordinarily be considered life threatening conditions outside BiH, may be jeopardised if they are forced to seek treatment in BiH.
PART I: REVIEW OF LEGAL PROVISIONS

1. Introduction

This paper examines the legal framework surrounding the provision of health care in Bosnia and Herzegovina (BiH). Prior to the outbreak of the 1992-95 conflict, BiH had a unified, compulsory form of national health insurance, under which every citizen of BiH, with very few exceptions, had effective health insurance coverage, guaranteeing a broad range of entitlements.

In the aftermath of the conflict, the health system fractured – resulting in the formation of a number of distinct health insurance schemes and funds. This fracturing resulted in an increase in the legislative and institutional complexity of the health care system. A secondary result, however, was a vast increase in the costs of managing the health care system(s) in BiH, in tandem with a growth in the bureaucracy necessary for management of the system, at a time when the pool of resources available for funding both health care facilities and the responsible administrations was shrinking rapidly.

As the International Crisis Group succinctly puts it: “Public administration (in general) in BiH is a labyrinth of pre-war, wartime and post-war institutions, often exercising overlapping administrative authority.”\(^1\) The provision of adequate health care services, in particular, is made more difficult simply by the wide-spread medical problems that have affected a large segment of the population as a result of the conflict in the country between 1992 and 1995. These difficulties, compounded by other factors, have led to the development of a situation in BiH in which nominal health insurance often does not translate into effective coverage, but in which individuals are generally unable to pay for expensive medical services privately.

Thus, while the vast majority of the BiH population is nominally covered by a public compulsory health insurance scheme, in practise many BiH residents experience difficulty in accessing health care.

2. Legislative and Institutional Frameworks

2.1. Constitutional Competency

Under the Constitution of Bosnia and Herzegovina, health care falls under the competency of the two Entities: the ‘Federation of Bosnia and Herzegovina’ (generally referred to as simply the ‘Federation’ or the ‘Federation BiH’), and the ‘Republika Srpska’ (‘RS’).\(^2\) In both legal and institutional terms, however, both Entities in BiH have borrowed heavily from the pre-war health care system, thus ensuring a degree of legislative and institutional similarity between the two Entities. Nonetheless, there remain a number of significant differences in health care provision in each Entity, and consequently a number of difficulties in ensuring access to adequate health care services for the population of BiH.

---

\(^1\) International Crisis Group, Rule of Law in Public Administration: Confusion and Discrimination in a Post-Communist Bureaucracy (Sarajevo, 15 Dec. 1999).

\(^2\) Art. III(1) and III (3.a), BiH Constitution.
While the RS has a political system in which power and authority are highly centralised, that of the Federation is decentralised. In consequence, responsibility for regulating the provision of health care in the Federation is shared between the Federation structures and each of the ten Cantons of which the territory of the Federation is composed.  

There are thus two sets of laws regulating health issues at the Entity level, and a further ten sets of laws for each of the ten Cantons in the Federation. In addition, Brcko District, with its distinct legal framework, has its own legislative scheme. The financial and other institutional costs imposed by this multi-layered bureaucracy and legislative subdivision significantly drain already limited public resources, as well as severely hampering the provision of health care to the population in general.

2.2. Entity Legislation

Health care systems in BiH are basically regulated by the Entity Laws on Health Care and on Health Insurance. These laws define general principles for the provision of medical services by various medical institutions, and outline the appropriate procedures for accessing health care facilities. While most people in BiH are covered by these laws, further complicating matters there are also special laws relating to the provision of health care to particular categories of persons, such as war-veterans and invalids, families of soldiers killed in combat, displaced persons, and refugees.

2.3. Health Insurance Schemes

Two basic types of health insurance are defined by law in BiH: compulsory and extended / private health insurance schemes. Of these, only the former is currently operational in both Entities. In each Entity, it flows from the relevant Law on Health Insurance, and is based on a system whereby compulsory contributions should be paid for all residents who receive any kind of regular income. These contributions are to be paid to Entity/Cantonal funds which are then responsible for ensuring the provision of health care services to those insured within their area of responsibility. The vast majority of BiH residents are covered by a compulsory health insurance scheme.

‘Extended’ health insurance schemes in each Entity (prosireno zdravstveno osiguranje) would allow, on a voluntary basis, those persons already insured under

---

3 Art. III(2,b), Federation BiH Constitution.
4 Brcko District was established by Decision of the High Representative on 8 March 2000. See BiH Official Gazette, no.9/00.
6 RS Law on Rights of Veterans, War-Invalids and Families of Fallen Soldiers [RS Official Gazette no. 35/99]. Federation BiH Law on Basic Rights on Social welfare, Protection of the Civil Victims of War and Protection of the Families with Children [Federation BiH Official Gazette no. 36/99]. Each Canton should subsequently have adopted laws regulating this issue. See also Sarajevo Canton Law on Assisting with Employment and Social-Welfare of Unemployed Persons [Sarajevo Canton Official Gazette no. 22/97]. See below for laws regulating Health Care entitlements for refugees and DPs.
7 Art. 19-76, Federation BiH Law on Health Insurance and Art. 10-70 RS Law on Health Insurance. See categories of insured persons as detailed below.
compulsory health insurance schemes to pay higher contributions in order to secure premium rights and services.\textsuperscript{8} In the absence of regulations defining the exact scope of coverage to be provided under these, however, no such scheme is yet in operation. The insurance schemes to be set up in order to implement the Extended form of health insurance should be named, in the Federation, voluntary health insurance scheme \textit{(dobrovoljno zdravstveno osiguranje)}\textsuperscript{9} and in the RS, private health insurance scheme \textit{(privatno zdravstveno osiguranje)}.\textsuperscript{10}

\subsection*{2.4. Compulsory Health Insurance Schemes and Coverage}

In general, all persons receiving any kind of regular income should be covered by a compulsory health insurance scheme.\textsuperscript{11} Persons with such coverage are defined as ‘insured persons’, in both the Federation and RS \textit{Laws on Health Insurance}.\textsuperscript{12} These schemes are financed mainly through health care contributions deducted from salaries, and to a lesser extent through public budgets and donations.\textsuperscript{13} In each Entity/Canton, health care services are administered by Health Care Funds, which receive contributions and then allocate and disburse these funds to medical institutions.\textsuperscript{14}

Contributions are paid directly to the respective fund on behalf of insured persons by means of compulsory deductions from gross income payments. Thus, for employed persons, this amount is deducted and paid by employers; for pensioners, by the relevant pension fund; for persons dependent on social welfare, by the relevant welfare institution;\textsuperscript{15} and for unemployed persons, by the employment agency with which they are registered.\textsuperscript{16} Insured persons are still required to participate directly in the costs of health care by paying a nominal fee towards the cost of medical treatment, which is typically a fixed percentage amount of the total cost (see below).\textsuperscript{17} Insured persons as well as their close family members enjoy coverage on the basis of these contributions.\textsuperscript{18}

\subsection*{2.5. Health Insurance Coverage}

The basic rights flowing from the compulsory health insurance scheme, as defined by the Entity \textit{Laws on Health Insurance}, include entitlements to:\textsuperscript{19}

- Health care assistance

\begin{itemize}
    \item \textsuperscript{8} Art. 77, Federation BiH \textit{Law on Health Insurance} and Art. 71-75, RS \textit{Law on Health Insurance}.
    \item \textsuperscript{9} Art. 78 & 79, Federation BiH \textit{Law on Health Insurance}.
    \item \textsuperscript{10} Art. 76-79, RS \textit{Law on Health Insurance}.
    \item \textsuperscript{11} See below for details.
    \item \textsuperscript{12} Art. 10-13, RS \textit{Law on Health Insurance} and Art. 19 & 27, Federation BiH \textit{Law on Health Insurance}.
    \item \textsuperscript{13} Art. 6, RS \textit{Law on Health Insurance} and Art. 13, Federation BiH \textit{Law on Health Insurance}.
    \item \textsuperscript{14} Art. 3, RS \textit{Law on Health Insurance} and Art. 13 & 16, Federation BiH \textit{Law on Health Insurance}.
    \item \textsuperscript{15} The means for payment of contributions for this category of persons are to be provided from the budget of the respective Entity/Cantonal governments.
    \item \textsuperscript{16} Art. 53, RS \textit{Law on Health Insurance} and Art. 86, Federation BiH \textit{Law on Health Insurance}.
    \item \textsuperscript{17} Art. 10, Federation BiH \textit{Law on Health Insurance} and Art. 44-46, RS \textit{Law on Health Insurance}.
    \item \textsuperscript{18} Art. 21 & 22, Federation BiH \textit{Law on Health Insurance} and Art. 14 & 16 RS, \textit{Law on Health Insurance}.
    \item \textsuperscript{19} Art. 31, Federation BiH \textit{Law on Health Insurance} and Art. 18-19, RS \textit{Law on Health Insurance}.
\end{itemize}
• Sick Leave pay
• Re-imbursement for health care-related travel costs
• Any other rights established by Entity law or by the Health Insurance Fund

2.6. Health Care Assistance

The extent of the entitlements to be granted under the two compulsory health care schemes are termed slightly differently in each Entity law. Moreover, as both sets of definitions are broad, both laws also prescribe that additional regulations will be adopted, which will define the exact scope of these entitlements. Such regulations have not yet been adopted in either Entity.

The means by which these rights will be defined also vary between Entities. In the Federation, the basic legislation requires Parliament to adopt an agreed Package of Health Care Assistance Rights and other by-laws, the Federation Ministry for Health to adopt standards and norms for the health insurance scheme and an accompanying Rule Book on procedures, and each Cantonal authority to adopt specific legislation defining the extent of health-care coverage in a number of fields.

This fragmented system is further complicated by the absence of precise rules on the sharing of data between medical institutions, Funds and Ministries at both Cantonal and Federal levels. Data collected at the Cantonal level should be forwarded to the Federation authorities who are then responsible for drafting the necessary by-laws and for defining the precise extent of coverage. More precisely, according to the Federation Law on Health Care, the respective Cantonal bodies are responsible for compiling statistical data which would enable the available capacities of medical institutions to be matched to the medical needs of the Cantonal population.

Data collection, as prescribed by the Federation Law on Health Care, is a complex process of data sharing. Medical institutions (i.e. hospitals, ambulantas, etc.) are supposed to keep records of medical services provided. These data are to be shared with Cantonal Health Institutes, Cantonal Health Funds and Cantonal Ministries for Health. These institutions should then forward the data compiled to the Federation Health Institute, Health Fund and Ministry for Health. At the Federation level, the compiled data are to be used for various purposes, but most importantly for the drafting of regulations defining the scope of health care to be provided under the Compulsory and Extended health insurance schemes.

Cantons, however, have consistently failed to provide these data to the Federation bodies. Moreover, Federation authorities have been unable to bring sufficient

---

20 Prescribed only by the RS Law on Health Insurance.
21 Art. 34 Federation BiH Law on Health Insurance; Art. 18 RS Law on Health Insurance.
22 Art. 32(2) &33(2) Federation BiH Law on Health Insurance and Art. 20 RS Law on Health Insurance.
23 To be adopted annually, in accordance with Art. 32(1) item (3), Federation BiH Law on Health Insurance.
24 Art. 35(3), Federation BiH Law on Health Insurance.
25 Art. 33, Federation BiH Law on Health Insurance.
26 Art. 8(1,7), Federation BiH Law on Health Care.
27 Art. 9(1.1), Federation BiH Law on Health Care.
pressure to bear on Cantonal authorities to provide the necessary information. As a result, more than three years after the adoption of the Federation laws, the Federation Parliament is yet to adopt the Package of Health Care Rights; the Federation Ministry has not issued the Rule Book; and the necessary legislation is yet to be completed throughout all Cantons. This in turn has held back the definition of the extent and scope of entitlements to be granted under the extended health insurance schemes.

The approach taken towards implementation in the RS has been somewhat clearer. According to the RS Law on Health Insurance, the RS Health Fund, upon obtaining opinions from the RS Ministry for Health, is responsible for defining the scope of health care assistance covered under the compulsory health insurance scheme. These by-laws are yet to be drafted. Nonetheless, the data necessary to match the medical resources available (and required) to the medical needs of the RS population has been compiled.

2.7. Other Entitlements

Entitlements related to sick leave pay, health care-related travel reimbursement, and other related rights are detailed in the respective laws. However, financial constraints inhibit full realisation of these rights problematic throughout BiH.

2.8. Administration of Health Care & Health Insurance Funds

The Federation Law on Health Insurance states that Health Care contributions (for the compulsory health insurance scheme) are to be paid to Cantonal Health Insurance Institutes (‘Cantonal Funds’). A Federation Institute for Health Insurance and Reinsurance (‘Federation Fund’) also exists, designed both as a body to co-ordinate provision of health-care coverage between Cantons, and to function as an insurance-provider of last resort for the Cantonal Funds (as a means of pooling risks through re-insurance). As such there should be ten Cantonal Health Funds and one Federation Fund. In the Federation contributions are paid directly to Cantonal Funds, there being no legislative requirement for any sums collected to be transferred to the Federation Health Insurance Fund. Moreover, in Croat-dominated areas of the Federation, including Cantons 7 (Mostar-West), a ‘parallel’ system of health insurance continues to operate through an inter-Cantonal “Institution for Health Insurance of the Croat Republic of Herzeg-Bosna”.

28 Penalty provisions in the Federation BiH Law on Health Care do not include any penalties for Cantons failing to provide the necessary data to the appropriate Federation bodies.
29 UNHCR was informed by the Deputy Director of the RS Health Fund that data has been collected from the field level by the RS Health Fund, and has been shared with the RS Ministry for Health.
31 According to the Federation Fund, Cantonal Funds have not been established in all Cantons within the Federation.
32 It should be noted that the ‘inter-Cantonal’ nature of this institution is debatable, as, at least in Canton 7, there does not appear to exist any ‘Cantonal’ Health Insurance Fund competent to make such an agreement. The continuing operation of this Institution may arguably constitute a significant obstacle to return, as non-Croats are apparently denied medical treatment in health care facilities run under the auspices of this Institute - ostensibly on the basis that insurance documents issued in Mostar East (for example) are reportedly not recognised in these facilities. For further details, please see p. 102, Ombudsmen of the Federation of Bosnia and Herzegovina, “Report on Human Rights Situation in the Federation of Bosnia and Herzegovina for 2000” (Sarajevo, March 2001).
Compulsory health insurance in the RS is channelled through a central Fund. Nonetheless, the RS Fund has several administrative organs: the Fund Assembly, Executive Board, Supervisory Board and Office of the Director. This complicated structure has rendered administration of the RS Fund expensive.

Aside from medical institutions, Health Funds and Ministries, the Federation Law on Health Care also provides for the establishment of numerous other institutions that are supposed to operate at the Cantonal and/or Federation level. These include Institute(s) for Public Health [Federation and Cantonal]; an Institute for Controlling Medicaments [Federation]; Transfusion Institute(s) [Federation and Cantonal]; a Federal Council of the Ministries for Health [Federation]; Cantonal Medical Institutes for Labour; and Cantonal Medical Institutes for Sport. The total number of such institutes envisaged is 44. The majority of these institutes have not been established. The RS Law on Health Care also prescribes the establishment of an Institute for Health Protection, which again should exist at regional and Entity levels.

In a country of four million inhabitants, there are thus twelve ministries in charge of health issues, not taking into account the sui generis governmental structure of Brcko District. Nonetheless, these complicated, expensive and inefficient administrative structures are reflective of the poor state of public administration in BiH as a whole.

3. Obstacles to Proper Functioning of the Compulsory Health Insurance Scheme

3.1. Impediments to Accessing Health Care

Entity legislation guarantees the right of access to health care to all citizens of BiH. As detailed above, medical fees are to be covered either through insurance schemes or are to be borne privately by patients.

In theory, the vast majority of persons in BiH are covered by either public or private health insurance schemes. In practice, however, many face difficulties accessing their medical insurance. This occurs principally because coverage from health insurance is geographically fixed to the place where the contributions for the health care insurance are paid (‘Health Care Registration’) and is non-transferable to another Canton or Entity; if a person moves away from their area of Health Care Registration (or even requires medical assistance elsewhere in the country), their health insurance does not move with them. Difficulties thus arise whenever a person moves from one Entity to the other, or within the Federation, from one Canton to another.

---

33 This administrative structure is typical of the pre-war Health Fund system.
34 Art. 59-73, Federation BiH Law on Health Care.
35 Art. 80-82, Federation BiH Law on Health Care.
36 Art. 83, Federation BiH Law on Health Care.
37 Art. 84 & 85, Federation BiH Law on Health Care.
38 Art. 95, Federation BiH Law on Health Care.
39 Art. 89, Federation BiH Law on Health Care.
40 Art. 91, Federation BiH Law on Health Care.
41 Art. 37, RS Law on Health Care.
42 Art. 3, Federation BiH Law on Health Care; Art. 10, RS Law on Health Care.
This effectively means that treatment can generally only be provided where the person is registered, without incurring personal liability for the full medical fees. Thus, a returnee to the RS who was previously displaced (either internally within BiH or as a refugee), and who had their health care contributions paid in the Federation, in any given Canton, would not be able to access health care in the RS on return to his/her place of origin in that Entity. Even within the Federation, a person from Tuzla Canton visiting Sarajevo Canton would be unable to access their health insurance in the latter. Were such a person then to change his/her insurance cover to Sarajevo Canton, he/she would not be covered in Tuzla.

A notable obstacle to such ‘coverage transfer’, is that in the Federation, contributions are directly paid to the respective Cantonal Health Funds, but that there is no legislative requirement for any of the Cantonal Funds to share their financial resources with the Federation Health Fund. Thus, despite the drafting of a number of agreements by the Federal authorities regulating co-operation between Cantons and Entities, these have not been approved or signed by the Cantonal authorities. As a result, within the Federation, coverage remains restricted to any one Canton only.

In the absence of effective insurance coverage, persons are obliged to pay the full costs of medical fees. 43 Given the prevailing economic situation in BiH, 44 in which generally low salaries are only irregularly paid, and in which pensions and other state-provided financial supports are often not paid, this requirement constitutes a considerable addition to an already-heavy financial burden.

By way of a safety net, there is a general provision in the legislation of both Entities stating that medical assistance must be provided to all persons in cases of emergency, regardless of ability to pay. 45 However, faced with perennial shortages in resources and equipment, the medical staff responsible for deciding upon provision of such treatment appear to have come under significant pressure to preserve resources. The resultant tendency has reportedly been the adoption of a restrictive approach to such treatment, thereby limiting the provision of health care assistance, including in cases of emergency.

A number of particularly significant individual legislative and institutional problems may also be noted, including:

---

43 Average medical costs for birth delivery range from DM/KM 300-500 in the RS to DM/KM 228-650 in the Federation.
44 The Federation Government adopted, on 10 November 1999 The Basis for Issuance of the Social Programme in the Federation (Federation BiH Official Gazette no. 49/99). According to the statistics published under this Programme, the total number of employees in BiH at that time [including the RS] was 657,047. As of July 1999 in the Federation there were: 407,224 employees; 65,913 laid off workers; 263,075 unemployed persons registered with the Employment Agency; approx. 150,000 black-market employees; 250,000 pensioners; and approx. 200,000 households in need of social welfare. The population of BiH stands at approx. 4 million, with 2.5 million in Federation.
45 Art. 3 (3), 39 & 156, Federation BiH Law on Health Care; Art. 10 and 98 (1), RS Law on Health Care. Under the Criminal Codes of both Entities, failure to provide medical assistance by a doctor is considered a criminal offence; See Art. 204 RS Criminal Code and Art. 246 Federation Criminal Code.
3.1.1. Non-Payment of Contributions into Health Care Funds

Article 87 (4) of the Federation *Law on Health Insurance* states that health care coverage will be withdrawn if the responsible contributing agency fails to make contributions to the competent Health Care Fund. Various Cantonal laws detail the implementation of this rule. As noted, the prevailing economic situation throughout BiH has resulted in the non-payment of contributions by an increasing number of companies and institutions. Typically, the first to be so deprived are those workers who are considered to be ‘laid-off’ – who are officially ‘employed’, but who are in fact not actually working for their ‘employing’ companies or institutions. Fear of civil unrest has in some circumstances meant that this clause has not been implemented for certain categories of persons, on behalf of whom contributing agencies have generally lobbied the authorities.

While according to the RS *Law on Health Insurance* there is no withdrawal of health care benefits resulting from unpaid contributions, there is, nonetheless, a provision in the Law stating that the RS Fund will not certify an insured person’s “health booklet”. Since correctly certified health booklets have to be presented when seeking medical treatment, such persons are effectively treated as uninsured persons.\(^{46}\) Again, political lobbying has eased the strict enforcement of this rule for certain categories of persons.

3.1.2. Absence of Inter-Entity / Inter-Cantonal Co-operation

Numerous categories of persons are affected by the absence of inter-Entity co-operation. The situation of pensioners is highlighted below as one such example: of all those nominally provided with compulsory insurance coverage, pensioners may generally be considered to be the category most regularly in need of access to health care services.

There are three Pensions Funds in BiH, based in Sarajevo, Mostar, and the Republika Srpska respectively, each responsible for the payment of pensions to those registered within their exclusive area of competence. The three funds recently completed an agreement whereby each fund agreed to pay pensions to “its” pensioners regardless of the location of these persons within BiH.\(^{47}\) However, as pensioners’ health insurance contributions will continue to be paid in the place of ‘registration’ of the pension entitlement, and as this coverage remains ‘geographically fixed’, the agreement fails to allow for health care coverage to be similarly provided regardless of location.

In the absence of a parallel agreement on transfer of health insurance payments from one Canton or Entity to another, health care coverage for pensioners remains tied to the geographical location of the place of pension entitlement. For those pensioners

\(^{46}\) Art. 28 RS *Law on Health Insurance*.
\(^{47}\) It is planned that the Mostar and Sarajevo funds will be merged into one Federation Pension fund, to be based in Mostar. See Federation BiH Official Gazette no. 49/00, 27 November 2000. The *Agreement on Mutual Rights and Obligations in the Implementation of the Pension and Invalidity Insurance* entered into force 18 May 2000 [RS Official Gazette no. 15/00 and Federation BiH Official Gazette no. 24/00 (30 June 2000)]. The Agreement was reached between the Directors of the three Pension Funds and was confirmed by the Federation and RS Governments. It specifies that each Fund will continue to pay the pensions of persons to whom it was paying a pension on the date on which the Agreement came into force.
displaced within BiH during the war who have since been receiving pension payments in their place of displacement, health care coverage will continue to be tied to their place of displacement. For those pensioners who may be returning from abroad, health care coverage will be restricted to their registered place of permanent (i.e. pre-war) residence within BiH.

A pensioner in need of medical assistance in his/her place of origin, if previously registered as a displaced person (‘DP’) within BiH, may thus be treated as ‘uninsured’. Similarly, a person returning to a situation of internal displacement within BiH, may also be treated as ‘uninsured’ if unable to return to their place of origin. Health care coverage is similarly non-transferable between Cantons within the Federation, being tied to the place of pension ‘registration’.

This situation, however, is not limited to the territory of the Federation. Despite its more centralised administrative structure, a lack of financial and medical resources, as well as an absence of legislation regulating co-operation between the various administrative areas of the RS, has resulted in health care being refused to persons registered in one part of the RS who require treatment elsewhere, as well as to such assistance regularly being denied to persons insured within the territory of the Federation.

Prior to the establishment of the Brcko District of BiH as an administrative district distinct from either Entity, the two Entity Health Funds provided coverage there. Moreover, the Brcko area was traditionally serviced by medical institutions in greater population centres such as Banja Luka or Tuzla. According to Article 1(3) of the Brcko District Statute, however, the two Entities are excluded from exercising health care/insurance functions within the District, so further complicating matters.

Nonetheless, Articles 70 and 71 of the Brcko Statute prescribe the continuation of Entity laws and regulations, as well as confirming the ‘legal succession’ of the municipal administration. A “Department for Health, Public Security and Other Services” has also been established as the competent body for health-related matters in the District. Despite this progress, however, and the recent signing of an agreement regulating Health Care provision and related matters between the Entities and the District, it would appear to be too early to make any comments about the implementation of this agreement.

3.1.3. Relations between BiH and Third Countries

Despite the finalisation of the text of an agreement between BiH and the Republic of Croatia, no agreements between BiH and third countries concerning the provision of health insurance have yet been signed. Additionally, health care agreements that were made between the former Yugoslavia (SFRY) and other states are un-enforceable, and so remain of little value as long as the issues of inter-Entity / Cantonal co-operation are not resolved.

48 Agreement on the Implementation of the Entity Obligations from the Final Arbitrage Award for Brcko on Health Care and Health Insurance dated 24 October 2000.
4. Special Legal Provisions for Specific Categories of Persons

The legislation currently in place in both Entities provides for equal and non-discriminatory access of DPs and repatriates/returnees (BiH refugees or DPs who have returned to their home location) to health insurance, as it does for all BiH citizens. In practise, however, such persons often effectively remain uninsured.

The primary reason for this situation is that many returnees and repatriates, as they face unemployment on return, but are unfamiliar with current regulations, fail to meet the 30 day deadline from arrival in BiH to register with their local Unemployment Bureau, as required to obtain the benefits that they would otherwise accrue as registered unemployed persons. As health care contributions for those unemployed are generally paid by the Unemployment Agency with which these persons are registered, returnees and repatriates who would otherwise obtain such cover, fail to qualify.

Nonetheless, in recognition of this problem, and realising that in general most returnees/repatriates lack the means to pay for health insurance from their personal resources, both Entities have adopted special laws (detailed below), enabling these categories of persons to access health care assistance irrespective of whether or not they are insured. A lack of financial resources, however, ‘aided’ by an apparent conflict of laws, has meant that these special provisions remain generally unenforced. Thus, in practice, many DPs and returnees / repatriates remain without access to health care.

4.1. Legal Framework for Displaced Persons, Returnees & Repatriates

The Federation Law on Displaced-Expelled Persons and Repatriates contains a general provision granting DPs the right to Health Care, although this is still to be regulated more precisely by Cantonal legislation. Although this legislation has not been adopted in all Cantons, in practise DPs are being provided with Health Care assistance throughout the Federation.

In the RS, Article 6 of the RS Law on Displaced Persons, Refugees and Returnees regulates Health Care assistance for displaced persons. The RS Law on Health Insurance also confirms that DPs are covered by compulsory health insurance as insured persons. Despite the existence of these two laws, though, the Deputy Director of the RS Health Fund has noted that unpaid contributions and budgetary constraints continue to hamper the full enjoyment of these rights.

Health care assistance for Returnees is regulated by the BiH Law on Refugees from BiH and Displaced Persons in BiH [hereinafter: the BiH Law on DPs] and the

---

49 Art. 11 of the Federation BiH Law on Displaced-Expelled Persons and Repatriates [Federation BiH Official Gazette no. 19/00 (26 May 2000)]. Under art. 19 (2) implementation is to be regulated at the Cantonal level in case such persons are uninsured.

50 Art. 6 RS Law on Displaced Persons, Refugees and Returnees [RS Official Gazette no. 33/99 (26 November 1999)] Although, it is not specifically mentioned which rights DPs may enjoy, this provision should be applied in conjunction with Art. 10 (12) and 8 (1) of the RS Law on Health Insurance. According to these provisions DPs are insured and all insured persons have equal rights to Health Care.
According to this Law, returnees are guaranteed access to ‘primary’ (basic) health care treatment, although the relevant Entity Laws do not similarly guarantee these entitlements. The precise details of the implementation of these rights remain to be defined by BiH and Entity legislation. Thus, while the current law on DPs and returnees in the RS fails to provide health care assistance for returnees, the Federation Law derogates this issue to Cantonal legislation, which remains incomplete.

4.2. Legal Framework for Refugees

The BiH Law on Immigration and Asylum [hereinafter: the BiH Law on Asylum] allows health care assistance to be prescribed for persons granted asylum and for asylum seekers. According to this Law, persons granted asylum are entitled to the rights defined in Articles 3-34 of the 1951 Convention Relating to the Status of Refugees; this is to be applied without prejudice to the provisions of domestic law or of any other international instruments which are already in force, or may come into force, under which more favourable treatment would be accorded to persons having been granted asylum.

Access to Health Care assistance is also guaranteed for asylum seekers. Under the BiH Law, asylum seekers are permitted to remain in the territory of BiH until a final decision on their application has been taken. They are to be issued a receipt on application for status, which acts as a residence permit, and an official document identifying them as an asylum applicant. The BiH Ministry for Human Rights and Refugees, in consultation with UNHCR, is bound to provide “reception conditions” for asylum applicants, including accommodation, food, access to health care and education. Given that the Law on Immigration and Asylum is yet to be implemented, and having considered the current absence of the necessary institutional arrangements and the lack of financial resources, UNHCR is in the interim participating in meeting the costs incurred by provision of these services.

5. Detailed Legislative Review

This section provides a detailed review of all generally relevant Entity laws, by-laws and regulations, as well as providing, as an example of Cantonal provisions concerning Health Care, a review of Sarajevo Cantonal laws and regulations.

51 Law on Refugees from BiH and Displaced Persons in BiH [BiH Official Gazette no. 23/99, (23 December 1999)].
52 Art. 18, Law on Refugees from BiH and Displaced Persons in BiH.
53 The RS Law on Displaced Persons, Refugees and Returnees does not include Health Care as a right to which returnees are automatically entitled. although Articles 6 and 9 of this Law confirm the entitlement to this right of DPs and Refugees.
54 Art. 19 in conjunction with Art. 11 of the Federation BiH Law on Displaced--Expelled Persons and Repatriates (Federation BiH Official Gazette no. 19/00, 26 May 2000).
55 Law on Immigration and Asylum [BiH Official Gazette no. 23/99 (23 December 1999)].
56 Art. 54(1) of the BiH Law on Immigration and Asylum states that persons granted asylum have the rights defined in Art. 3-34 of the 1951 Convention. These include the right to “free basic medical care, in case of need, both upon arrival and throughout the asylum procedure.”
57 Art. 50(2) Law on Immigration and Asylum.
5.1. Republika Srpska

Article 37 of the RS Constitution guarantees the right to health care to any person, in accordance with the relevant laws and regulations. Children, pregnant women and elderly persons are entitled to health care through public funds. Other categories’ entitlements are determined in accordance with the conditions determined by the applicable RS laws. The Law on Health Insurance and the Law on Health Care are the main relevant sources of law in the RS. The Law on Health Care states that the provision of ‘primary health care’ (i.e. all health care needs not requiring complex examination and treatment) is the priority for the health care system.58 There are also specialised levels and highly specialised levels of health care. According to the RS Law on Health Care, the out-patient clinic (‘ambulanta’) for family medicine is a basic provider of primary health care for all members of a family.59 Article 7 of the RS Law on Health Care, in conjunction with Art. 102.2, provides for medical centres (dom zdravlja) to function in place of out-patient clinics (ambulanta) until these are established as necessary.

The RS Law on Health Care emphasises the principle of equality of all citizens, and indicates that health care must be provided exclusively on the basis of medical requirements.60 Article 10 of the Law imposes an obligation on health institutions and on employees in these institutions to provide medical assistance in any emergency case to the extent of their capacities.61 If there is no such capacity, such persons should be sent to a health institution where the appropriate treatment is available.

Article 22 of the Law also lists all types of medical institutions in the RS, including: out-patient clinics of family medicine (ambulanta), medical centres (dom zdravlja), pharmacies, hospitals, institutes for health care, specialised institutes, as well as clinics and clinical centres. The RS Government has issued a plan for its medical institutions, detailing the kind and number of health institutions, as well as their capacity, structure and location, based on a strategy for developing the RS health care system over a set period of time.62 Article 56 of the RS Law on Health Care states that citizens of countries that have not made an appropriate agreement with BiH shall be liable to pay for health care according to a fixed tariff.

According to the RS Law on Health Insurance, there are two health insurance schemes in the RS: compulsory and extended health insurance. The latter is to be implemented through private health insurance. As in the preceding section, the overview below shall focus on the compulsory health insurance scheme which applies to the majority of the population, as extended and private health insurance are not yet functional.

58 Art. 6 RS Law on Health Care.
59 Also see the Decree on the Work of the Out-Patient Clinic of Family Medicine (RS Official Gazette no. 14/99) issued based on the previously applied Law on Health Care (RS Official Gazette no. 12/93).
60 Art. 9, RS Law on Health Care.
61 Penalty provisions for breach of this requirement are laid out in Art. 98(1) of RS Law on Health Care.
62 Art. 17(5), 99 and 103, RS Law on Health Care. Existing health care institutions continue to operate in accordance with the Decision on Plan of Network of Health Care Institutions (Official Gazette no. 26/93) until the RS Government issues a new plan.
Regarding this extended coverage, however, it may be worth noting that under Article 71 of the RS Law on Health Insurance, coverage can be obtained from the RS Health Insurance Fund, on payment of a higher premium, for some rights which are not covered by the compulsory health insurance scheme - including exemption from participation in the cost of health care services. The Fund itself would be responsible for determining the conditions and the method of use of the rights obtained from expanded health insurance.

Alternatively, Article 76 of the RS Law on Health Insurance allows for insurance to be obtained privately for coverage beyond the scope of the compulsory insurance scheme. Private insurers can enter directly into contracts with health institutions, provided the schedule of uniform prices of health services determined by the Fund of Health Insurance and by the Health Chamber is adopted.

Quite apart from these ‘extended’ provisions, all RS citizens (as well as other categories of persons as detailed in the Law) are covered by compulsory health insurance. The rights granted under the compulsory health insurance scheme are guaranteed by the RS Health Insurance Fund and by employers under the condition defined by the Law on Health Insurance and by the Fund itself. The entitlements included in the RS compulsory health insurance scheme are to health care, to compensation for any salary loss during a period of temporary incapability to work, and to any other rights established by the Law or by the Fund.

Insured persons can exercise their right to health care in those medical institutions with which the Fund has concluded a contract. Health Care assistance is financed through the payment of contributions on behalf of insured persons to the Health Insurance Fund, and from any other sources as stipulated further to the Law.

Article 10 of the Law on Health Insurance stipulates that there are 14 categories of persons insured under the scheme in the RS. Family members of these insured
persons are also entitled to compulsory health insurance unless they themselves benefit from some other form of health insurance. For the purposes of the RS Law (Article 14), ‘family members’ include: (i.) members of the nuclear family: spouse and children born in marriage or out of wedlock, adopted children and step-children if legal conditions are fulfilled, and (ii.) members of the extended family who are supported by the insured person. Article 17 of the Law details those categories of persons entitled to benefit from health insurance coverage in case of work related injuries.

Under Article 19, the provision of health care includes:  

- The prevention, combat and early detection of diseases and other conditions;
- Medical examinations, check-ups, and general health monitoring;
- Medical treatment;
- Dental treatment;
- Rehabilitation, both in hospitals and out of hospital institutions;
- Provision of medication;
- Prosthesis, orthopaedic and other devices, sanitary devices, artificial teeth and material related to stomatology.

The extent of these entitlements are determined by the Fund in co-operation with the competent ministry. Insured persons are entitled to health care, in recognised health institutions, at the expense of the Fund following a recommendation by a doctor. This does not apply to emergency cases where by law, care must be provided on an immediate basis, regardless of insurance coverage or status. Insured persons are to have access to health care at the medical institution closest to their permanent residence.

Persons in the RS are entitled to compulsory health insurance coverage only if they are officially recognised as an insured person. This status is determined by the RS Health Insurance Fund based on registration with the health insurance scheme and validation of a health booklet (zdravstvena knjizica) upon payment of health care contributions. Such contributions are to be paid on or before the 10th day of each month (for the previous month’s coverage). Persons who cannot prove their status must cover all incurred medical costs, except in cases of emergency.

Insured persons are required to contribute directly towards the costs incurred for medical treatment (licno ucesce u troskovima zdravstvene zastite) by paying a fixed amount per treatment, determined by the Fund of Health Insurance. The Fund can also determine which categories of persons are exempt from paying these participatory fees. The amount to be paid directly varies, depending on the nature of the medical complaint, the cost of the examination and/or treatment, and the social

---

70 Art. 21, RS Law on Health Insurance regulates when medical check ups are not considered as part of health care in the sense of Art. 19 (e.g. medical check ups prior to employment, to obtain driver’s license, etc.).
71 Art. 20, RS Law on Health Insurance.
72 Art. 24(1), RS Law on Health Insurance.
73 Art. 27(1), RS Law on Health Insurance.
74 Art. 28, RS Law on Health Insurance.
75 Art. 28, RS Law on Health Insurance.
situation of insured persons.\textsuperscript{76} The \textit{Decision on Participation of Insured Persons in Health Care Expenses} outlines the exact form and relative percentages of total costs to be paid directly by insured persons, as well as the conditions under which these amounts are to be paid, grounds for exemption from participation, and other related issues.\textsuperscript{77}

The financing of the compulsory health insurance scheme is regulated by Articles 52 to 61 of the RS \textit{Law on Health Insurance}. Article 53 states that Contributing Agencies are obliged to make contributions to the Fund (e.g. for displaced persons and refugees, the ‘competent body’ should make these payments; for employed persons, their employer; for unemployed persons, the local employment office; for pensioners, the Pension Invalidity Fund, and for social cases the competent municipal body). There is also a \textit{Law on Changes and Amendments to the Law on Contributions}, that determines the amounts to be paid in contributions.\textsuperscript{78}

The costs of treatment are determined by the Health Insurance Fund and by the RS Health Chamber and are published as a uniform price list for health services and medication.\textsuperscript{79} The ‘full’ prices indicated on this list are to be used when health service is provided without the recommendation of a doctor or for those persons insured under extended and/or private health insurance.\textsuperscript{80}

The \textit{Decision on the Establishment of a Positive List of Medicines} provides a list of those medicines that may be prescribed, issued and charged at the expense of the RS Health Insurance Public Fund.\textsuperscript{81} The Decision contains some 120 different groups of basic medicines identified by the RS Ministry for Health and Social Care, which may be provided by prescription and upon certification of paid contributions.\textsuperscript{82}

\subsection*{5.2. Federation}

As noted above, the ten Cantons in the Federation share competency for health issues with the Entity.\textsuperscript{83} The Federation is responsible for ensuring that all internationally recognised rights and freedoms are granted, and that all persons in the territory of the Federation enjoy the right to health care.\textsuperscript{84} Health care assistance and medical

\begin{itemize}
\item \textsuperscript{76} Art. 44 and 45, RS \textit{Law on Health Insurance}, stipulate that pregnant women, or those with a baby less than one year old, children until the age of 15, persons with certain contagious diseases and elderly people are exempt from participation in these costs.
\item \textsuperscript{77} RS Official Gazette no. 11/99.
\item \textsuperscript{78} RS \textit{Law on Changes and Amendments to the Law on Contributions} (RS Official Gazette nos. 2/95, 15/96, 23/98, 13/00 and 29/00).
\item \textsuperscript{79} Art. 61 RS \textit{Law on Health Insurance}.
\item \textsuperscript{80} The \textit{Decision on Increasing Prices of Health Services} [RS Official Gazette no. 11/99] increased the price of health services by 78.1\%. This Decision was passed on the basis of the previously applied \textit{Law on Health Insurance} (RS Official Gazette no. 12/93).
\item \textsuperscript{81} RS Official Gazette no. 34/00; passed by the RS Health Insurance Public Fund in 1998. There is also a \textit{Decision on Determination of National List of Essential List of Medicines} [RS Official Gazette no. 31/98].
\item \textsuperscript{82} See \textit{Decision on Participation of Insured Persons in the Costs for Use of Health Care} [RS Official Gazette no. 11/99] according to which insured persons must pay 20\% for medicines from the positive list of medicines based on the prescription.
\item \textsuperscript{83} Art. III (2,b) Federation Constitution in conjunction with Art. II.
\item \textsuperscript{84} Art. II A (2,o) Federation Constitution.
\end{itemize}
insurance in the Federation are regulated in the Law on Health Care\footnote{Federation BiH Official Gazette no. 29/97.} and the Law on Health Insurance.\footnote{Federation BiH Official Gazette no. 30/97.}

The Federation Law on Health Care, in conjunction with the Federation Law on Health Insurance, stipulates the conditions under which persons are entitled to health care. In the Federation, health care is composed of primary (primarna zdravstvena zastita), specialist-consultant (specijalisticko-konzultativna zdravstvena zastita), and hospital health care (bolnicka zdravstvena zastita).\footnote{Art. 6, Federation BiH Law on Health Care.} Primary health care (primarna zdravstvena zastita) covers: general medical practise health care and services, school health care, hygiene-epidemiological protection, dental care, emergency medical treatment, industrial/occupational medicine, health care for women and children, pharmacy prescriptions and diagnostic services.\footnote{Detailed in Article 20, Federation BiH Law on Health Care.} Specialist-consulting health care (specijalisticko-konzultativna zdravstvena zastita) consists of diagnostics, treatment and medical rehabilitation of patients not requiring hospitalisation.\footnote{Art. 6(3), Federation BiH Law on Health Care.} Hospital health care (bolnicka zdravstvena zastita) comprises diagnostics, treatment and medical rehabilitation of patients in appropriate health care institutions.\footnote{Art. 6(4), Federation BiH Law on Health Care.}

According to Article 26 of the Federation Law on Health Care, every person has an inalienable right to access health care services providing an equal standard of care (determined by the relevant health insurance regulations) and to receive immediate medical assistance in cases of emergency.\footnote{Art. 156, Federation BiH Law on Health Care.}

The Federation Law on Health Care envisages the following types of medical institutions: (i) primary health care should be provided in medical centres - house of health (dom zdravlja), regional out-patient clinics (podrucna ambulanta), institutions servicing health care at home (ustanova za zdravstvenu njegu u domu), and pharmacies (ljekarna), while (ii) specialist–consulting and hospital medical care are to be provided through polyclinics (poliklinika), hospitals (bolnica), sanatoriums (ljeciliste) and institutes (zavod).

The Federation Law on Health Care also stipulates the charging of fines\footnote{Art. 39, Federation BiH Law on Health Care stipulates that health services must be organised in such a manner that emergency medical assistance, including emergency transportation, is provided and available at any time.} of between KM 500 and KM 2,000, for minor offences committed by health institutions where a person is prevented or denied their entitlement to health care,\footnote{Art. 26, Federation BiH Law on Health Care.} and where emergency medical treatment (including emergency transportation of a patient if necessary) is not provided.\footnote{Art. 39, Federation BiH Law on Health Care.}
According to the *Law on Health Insurance*, there are two health insurance schemes in the Federation: compulsory and extended health insurance. The latter is intended to operate on a voluntary basis. As this scheme is not currently in operation, however, the following examination will focus mainly on the compulsory health insurance scheme.

The entitlements provided by the compulsory health insurance scheme are financed by Health Funds which exist at both Federation and Cantonal levels. With regard to the Cantonal Funds, Article 99 of the Federation *Law on Health Insurance* affirms the responsibilities of the Cantonal insurance institutes (Cantonal Funds), while the responsibilities of the Federation Fund are specified in Article 100 of that Law. Compulsory health insurance covers certain categories of persons together with their family members.

Citizens with permanent residence in the Federation, who have sufficient financial means to support themselves, but who do not fall into one of the categories outlined in Articles 19-26 of the *Law on Health Insurance*, are required to obtain health care coverage at least to the same extent as family members of insured persons. Permanent residents of the Federation who are permanently incapacitated and who do not have the means to be self-supporting (in accordance with the provisions on social welfare), and who are not entitled to health care on some other basis, are also covered within the scope of the compulsory health insurance scheme. This also applies to the family members of persons so insured.

The entitlements included in the Federation compulsory health care scheme are to health care, compensation for sick leave and to reimbursement of travel costs related...

---

95 Art. 77, Federation BiH *Law on Health Insurance* states that, should the Cantonal legislative body introduce extended health insurance in accordance with Art. 8 of the Law, it shall also pass a decision to define the forms of health care, rights and benefits provided by extended health insurance, as well as the conditions and the method of accessing and of operation of the insurance. Separate funds are to be established for these ‘extended’ schemes.

96 Voluntary health insurance is envisaged in Art. 78, Federation BiH *Law on Health Insurance* in conjunction with Art. 12 of this Law. Citizens may acquire additional health care entitlements for themselves and their family members beyond the coverage provided by the compulsory insurance scheme. The extent of the rights provided by voluntary health insurance are to be specified by private insurance firms.

97 Detailed in Art. 19 and 26, Federation BiH *Law on Health Insurance*. There are 21 categories, including; employed persons, self-employed persons, agricultural workers, pensioners, registered unemployed persons (who have met all required deadlines, including those who have registered within 30 days from return from abroad, provided they were insured before departure from BiH), permanent residents of the Federation who are registered as military or other invalids in the Federation and who meet certain conditions, or who receive family invalidity benefit in accordance with the relevant provisions, members of the Federation armed services and members of Cantonal police forces.

98 Family members of persons falling within above mentioned categories are also insured under this scheme (i.e. spouses, children, parents, grandchildren, brothers, sisters, grandparents if destitute and dependent on the insured person). Art. 22 regulates that any children of an insured person are insured until 15 years of age, or until 26 if they are in regular education (high school or university).

99 Such persons are also obliged to make an initial payment to the to the appropriate Health Care Fund equal to the cost of 6 months’ retroactive coverage.

100 Art. 26, Federation BiH *Law on Health Insurance*. 
Family members of insured persons are also entitled to health care and to reimbursement of travel costs related to health care.\textsuperscript{102}

Insured persons are also entitled to medication, according to the list of medicines that can be prescribed at the expense of the Cantonal insurance institutes, as per Cantonal regulation.\textsuperscript{103} The extent to which insured persons are required to participate in the costs of certain types of care provision is also dependent on Cantonal regulation,\textsuperscript{104} although the social situation of insured persons and the extent of the funds available for financing compulsory health insurance are taken into consideration when passing these regulations.\textsuperscript{105}

Cantonal Funds are also responsible for the implementation of compulsory health insurance. Article 87 (4) of the Federation Law on Health Insurance states that failure of the Contributing Agencies to pay contributions to the Fund shall preclude the exercising of health care rights, except in cases of emergency. These rights will be re-established upon payment of all contributions.

The Health Funds financial holdings are compiled of paid contributions, as well as income from taxes, donations, fees, and Federation and Cantonal budgets. These funds are collected and then re-distributed at the Cantonal level, through Cantonal insurance institutes.\textsuperscript{106} These institutes prepare annual income and expenditure plans to finance compulsory health insurance coverage from the funds made available, and to determine health care standards to be adopted in each region. Cantonal health insurance institutes are also obliged to undertake any appropriate measures when existing funds are found to be insufficient to cover compulsory health insurance expenditure. They are also entitled to forward to and to receive funds from the Federation Insurance Fund.

Uninsured persons are personally liable for any costs incurred through the use of health care facilities, except in cases of emergency.

Only persons who can prove their status as insured persons are entitled to be provided with health care assistance under the compulsory health insurance regime, validated by a health booklet (zdravstvena legitimacija).\textsuperscript{107} The contents and form of these booklets are governed by the Instruction on the Contents and the Form of the Health

\begin{footnotesize}
\textsuperscript{101} Art. 31, Federation BiH Law on Health Insurance.
\textsuperscript{102} Health Care assistance is categorised as consisting of primary health care, specialist-consulting services and hospital health care. (Article 34, Federation BiH Law on Health Insurance). Such health care covers: emergency medical treatment; treatment of contagious diseases; treatment of acute, chronic disease in life threatening conditions; health care of children up to 15 years of age and school pupils and university students; the detection and treatment of endemic nephropathy; the treatment of malign diseases and diabetes; pre-natal health care and early motherhood; health care of mental illness in case of a treat to life; treatment of progressive neuromuscular diseases such as paraplegia, quadriplegia, cerebral paralysis and multiple sclerosis; compulsory immunisation against infant contagious diseases; the treatment of work-related injuries and illnesses; health care of persons aged 65 and above; treatment of drug addiction; and the provision of blood bank services. (Article 32, Federation BiH Law on Health Insurance).
\textsuperscript{103} Art. 33, Federation BiH Law on Health Insurance.
\textsuperscript{104} Art. 10, Federation BiH Law on Health Insurance.
\textsuperscript{105} Art. 90, Federation BiH Law on Health Insurance.
\textsuperscript{106} Art. 82, Federation BiH Law on Health Insurance.
\textsuperscript{107} Art. 53 Federation BiH Law on Health Insurance.
\end{footnotesize}
Cantonal health insurance institutions issue health booklets, which are to be verified prior to use. The competent Cantonal Health Insurance Institution is responsible for the verification of health cards. Health booklets are only valid with an identification card, although in emergencies health care assistance is to be provided without any such conditions attached. Should hospital treatment be required, a patient must also provide the hospital with a doctor’s note of recommendation.

The Decision on Determination of Temporary Standards and Norms of Health Care from Compulsory Health Insurance specifies temporary standards and norms of health care to be provided under compulsory health insurance in the Federation. These standards and norms define the health standards to be applied equally to all insured persons.

Emergency health care includes immediate emergency health assistance as required, emergency assistance for birth deliveries outside of hospitals, emergency transportation of sick and injured persons and women in labour to appropriate health institutions, medical treatment of sick and injured persons in health institutions or at home during weekends and holidays, as well as resuscitation during transportation. The recently issued Federation List of Essential Medicines is also the mandatory list of ‘Positive Medicines’ in all ten Cantons.

### 5.3. Cantonal Regulations: Case Study - Sarajevo Canton

Given the complexity of Cantonal regulations in the Federation, an exhaustive analysis of all ten Cantons is beyond the scope of the present report. Moreover, as legislative frameworks vary considerably between Cantons, the information provided below on Sarajevo Canton does not necessarily reflect the situation in other Cantons. It should also be noted that in many ways, the situation of Sarajevo Canton is unique as it is the place of temporary residence of many of those displaced in the course of the conflict. It also contains the highest concentrations of advanced medical equipment and facilities in the country, and the average income in Sarajevo is generally considered to be higher than that in many other areas of BiH. Nonetheless, as an example, an analysis of the manner in which health care is regulated at Cantonal level may be useful.

---

108 Federation BiH Official Gazette no. 11/00 The same Official Gazette also contained the Instruction on the Method on Registration and De-registration of the Insured Person to/from Compulsory Health Insurance. This latter is based on Art. 54 (7) of the Federation BiH Law on Health Insurance. It regulates the content and format of the de-registration form for compulsory health insurance coverage. Registration and de-registration of compulsory health insurance coverage is processed at Cantonal insurance institutions.

109 This procedure was introduced because many persons who were not insured, or for whom contributions had not been paid, were misusing the system by producing other persons’ health cards.

110 Federation BiH Official Gazette no. 21/00.

111 Art. 1, Decision on Determination of Temporary Standards and Norms of Health Care from Compulsory Health Insurance.

112 Decision on Accepting the List of Essential Medicines Applied the Territory of Federation (Federation BiH Official Gazette no. 28/00). The Decision is temporary, to be applied as of the end of September 2000 until the Federation law on medicines is passed by the Parliament. Cantonal health insurance institutes shall determine the percentage of the total price to which insured persons are required to participate for the issuance of the medicines contained on this list.
The Constitution of Sarajevo Canton states that the Canton has joint competence with the Federation authorities in the area of health care, to be carried out either independently or in co-ordination with the Federation. The Institute for Public Health in Sarajevo Canton was established in 1999 by the Decision on Establishing the Institute for Public Health in Sarajevo Canton.

The extent to which insured persons are required to participate in the costs for use of health care in Sarajevo Canton is regulated by the Decision on Individual Participation of Insured Persons in the Costs of Use of Health Care and Payment of Cost of Medical Treatment in the Territory of Sarajevo Canton. This Decision specifies the nature of individual participation of insured persons in some health care costs, the categories of insured persons who are exempt from paying such costs, methods of payment, record keeping and the subsequent presentation of the collected funds. Article 2(1) of this Decision determines the amounts to be paid by those so insured, ranging from KM 1 to KM 200.

The categories of insured persons exempted from participation in the costs of health care are:

- Insured persons receiving permanent material assistance under the regulations on social welfare and persons accommodated in social welfare institutions;
- Families of killed soldiers;
- Military invalids with invalidity ranging from 20-100%, and civil war victims with invalidity of at least 60%;
- Close family members of military invalids to whom rights to health care and other related assistance have been recognised;
- Pensioners (under certain conditions);
- Unemployed persons registered with the employment office;
- Displaced Persons (under certain conditions).

Article 5 of the Decision on Individual Participation of Insured Persons lists the medical services for which all categories of insured persons must pay fully. These

---

113 Art. II (13,b), Sarajevo Canton Constitution. Competencies enumerated in Art. II (13) are performed in the scope as agreed with the Federation authorities.
115 Decision on Individual Participation of Insured Persons in the Costs of Use of Health Care and Payment of Cost of Medical Treatment in the Territory of Sarajevo Canton, Canton Sarajevo Official Gazette 11/00; issued on the basis of Art. 90, Federation BiH Law on Health Insurance.
116 This Decision further clarifies that insured persons are not required to participate in the costs of health care in the following cases: 1) health assistance in emergency cases (including transportation); 2) medical treatment of acute and chronic diseases in cases when life is endangered; 3) medical treatment of contagious diseases subject to obligatory reporting, (including AIDS); 4) pre and post-natal health care; 5) health care of children under 15, pupils under 19 years, and university students under 26; 6) health care for persons suffering from mental illnesses who can endanger their own lives and lives of other persons; 7) health care of persons suffering from progressive neuro-muscular diseases, paraplegia, quadriplegia, cerebral paralysis and multiple sclerosis; 8) medical treatment in case of injury at work and professional illnesses; 9) health care of persons over 65; 10) treatment of kidney disease (hemodialysis); 11) treatment of malignant diseases, and for diabetes; 12) medication for diseases and conditions referred to 1-11 above, prescribed by the list of medicines to be charged at the expense of health insurance institutes and; 13) obligatory immunisation.
117 Art. 4, Decision on Individual Participation of Insured Persons in the Costs of Use of Health Care and Payment of Cost of Medical Treatment in the Territory of Sarajevo Canton.
include: abortion for non-medical reasons, acupuncture, aesthetic/cosmetic surgery, treatment in spas (with certain exceptions), medical treatment abroad, health assistance in case of alcohol intoxication, examination by a specialist upon the request of an insured person, and non-obligatory immunisation.

Participation costs are paid directly at the health care institution where the insured person uses health care and a receipt is generally issued confirming that payment has been received. Where health care is to be provided in a Canton other than the one where the insured person is registered (assuming that there is an inter-Cantonal agreement to that effect), he/she must pay the participation costs according to the Cantonal regulations of the receiving institution.

The Decree on the Scope of Rights of Insured Persons to Use Orthopaedic and Other Devices, Endoprosthesis, Dental-Prosthesis Assistance regulates the extent of insured persons’ entitlements to receive and to use orthopaedic and other devices, endoprosthesis, dental-prosthesis and other related devices under the Cantonal compulsory health insurance scheme. The entitlements that flow from this decree are to be exercised in accordance with the Federation Law on Health Insurance, the Decree itself, as well as the Decision on Individual Participation of Insured Persons in Covering the Costs of Use of Health Care in Sarajevo Canton. The Decree also regulates the list of devices, the periods of their use and the extent to which the Sarajevo Cantonal Health Insurance Fund is required to participate in the associated costs.

Contributions towards compulsory health insurance coverage are regulated primarily by the Decision on Basis and Rates of Contributions for Compulsory Health Insurance in Sarajevo Canton. This Decision provides the basis for the calculation and payment of contributions to be made towards compulsory health insurance that are not determined elsewhere by the Law on Contributions. The contributions collected belong to the Health Insurance Fund of Sarajevo Canton. The Decision states that contributing agencies are responsible for ensuring that contributions are paid. Contributions range from 6% to 13%.

---

118 Art. 10.2 Decision on Individual Participation of Insured Persons in the Costs of Use of Health Care and Payment of Cost of Medical Treatment in the Territory of Sarajevo Canton.

119 Decree on the Scope of Rights of Insured Persons to Use Orthopaedic and Other Devices, Endoprosthesis, Dental-Prosthesis Assistance, Canton Sarajevo Official Gazette no. 7/00 issued on the basis of Art. 33 Federation BiH Law on Health Insurance.

120 The amount to be paid by the Health Insurance Fund varies from KM 45 to KM 4500 (e.g. partial dental prosthesis KM 50, glasses KM 25, leg prosthesis KM 400-4500).

121 Decision on Basis and Rates of Contributions for Compulsory Health Insurance in Sarajevo Canton, Canton Sarajevo Official Gazette no. 11/00. Issued on the basis of Art. 84 and 85 in conjunction with Art. 103, Federation BiH Law on Health Insurance and Art. 1 section 2, Federation BiH Law on Contributions [Federation BiH Official Gazette no. 35/98].

122 Art. 3-6 of the Decision on Basis and Rates of Contributions for Compulsory Health Insurance in Sarajevo Canton (Art. 3 regulates the payment of contributions from salaries and other incomes of insured persons, along with the basis of the calculation and the rates of contributions; Art. 7 regulates the payment of contributions or paid salaries at the expenses of employer, along with the basis of the calculation and the consequent rates of contributions. Art. 8 regulates the payment of contributions from other sources, along with the basis of the relevant calculations and rates of contributions).
The Decision on Adopting the Network of Health Institutions in the Territory of Sarajevo Canton\textsuperscript{123} details the network of health institutions in Canton Sarajevo and confirms that primary health care is to be provided by the Dom Zdravlja of Sarajevo, by Public Pharmacies of Sarajevo and by other given Institutes.\textsuperscript{124} This Decision also lists the network of specialist-consulting health care institutions and of hospital health care institutions.\textsuperscript{125}

In addition to the regulations noted above, there are also a number of special Cantonal laws which provide protection mechanisms for certain specific categories of persons, and which usually include a separate health care regime. The Sarajevo Cantonal Law on Social Welfare, Protection of Civil War Victims and Protection of Families with Children\textsuperscript{126} was issued pursuant to the Federation BiH Law on Social Welfare, Protection of Civil War Victims and Protection of Families with Children\textsuperscript{127} and may serve as an example of such a Law. Article 15 of this Cantonal Law affirms that beneficiaries of non-ad hoc financial assistance are to be provided with health care unless they exercise that right (to health care) through other means of obtaining health insurance coverage. Article 80 of this Law regulates that civil war victims and family members in receipt of a family invalidity payments are to be entitled to health care so long as they are unable to obtain health insurance coverage on any other basis.

In case of emergency, a doctor must assess the need for urgent medical treatment, the manner and scope of such assistance, and the need for appropriate transportation. A doctor must also assess when an acute or chronic disease is at such a stage that the life of an insured person would be endangered if appropriate medical assistance is not rendered immediately.

6. Conclusion

This paper has provided a review of the main legislative frameworks regulating the provision of health care services to the population of Bosnia and Herzegovina. As can be seen from the foregoing exposition, while the legal frameworks that currently exist are certainly over-complex, legally at least, the entitlements included in the compulsory health insurance schemes under which the majority of the population are nominally covered are extensive.

\textsuperscript{123} Decision on Adopting the Network of Health Institutions in the Territory of Sarajevo Canton, Canton Sarajevo Official Gazette no. 14/00. This Decision also notes that since 1996 the number of physically and psychically ill persons has increased and that more Centres for Rehabilitation at the level of primary health care (in order to facilitate the re-integration of war victims.) At present there are 6 such centres in Sarajevo Canton.

\textsuperscript{124} The following institutes exist in Sarajevo Canton: an Institute for Public Health, an Institute for Work Medicine, an Institute for Sports Medicine, an Institute for Emergency Services, an Institute for Health Care of Women and Motherhood, and an Institute for Alcoholism and Intoxication.

\textsuperscript{125} There are 3 hospitals in Sarajevo Canton: Sarajevo General Hospital (300 beds); Sarajevo Clinical Centre, with 3 levels of hospitalisation (General Level Hospital, Cantonal Hospital and Tertiary Health Care –1386 beds), and Special Hospital Jagomir (psychiatric hospital with 70 beds).

\textsuperscript{126} Sarajevo Cantonal Law on Social Welfare, Protection of Civil War Victims and Protection of Families with Children, Canton Sarajevo Official Gazette no. 16/00.

However, it is also undeniable that both the level of services provided to those who are insured is often well below the levels guaranteed by law, and that despite the legal semblance of universal health coverage, there remain a significant number of persons who either do not have insurance, or who experience difficulty in accessing health care in BiH, despite holding health insurance coverage from one of the health insurance funds.

Many reasons can be cited as having contributed to this situation. Primarily, and most significantly, in contrast with the single BiH Health Fund that existed before 1992, the existence of two Entity and ten Cantonal health funds laws (each with their own administrative framework and bureaucracy), has undermined the effective operation of the principle of a common pool of resources and of commonly-shared risks that lay behind the original concept of state-provided health care. Moreover in the current economic climate, even were contributions universally collected and paid in full, the low income base of the persons so insured would still fail to provide an adequate contributory base for the operation of the health care system. Thus, as the institutional costs of providing health care have increased, so the financial base on which these services are to be provided has decreased, rendering precarious the state of the health care system in BiH as a whole.

Despite these general considerations, however, a number of more specific legal shortcomings be cited on examination of the legal framework and functioning of the health care systems in BiH. The most significant of these more specific shortcomings are the non-transferability of health insurance coverage from one Canton or region to another, and the absence of any obligation on the part of the Cantonal Funds to transfer any resources or data to the Federation Health Insurance Fund. Not only are these solely legal shortcomings – although both are undoubtedly the subject of a great deal of debate concerning the preservation of scarce financial and medical resources for particular controlling bodies – they are also both easily rectifiable, in the former case by inter-Entity and inter-Cantonal co-operation and/or formal agreement, and in the latter case, by simply devoting more attention to the actual provision of health care and less to the preservation and concentration of resources in small geographic and population areas.

It should be noted that certain obstacles to the proper functioning of the health system as detailed above, also constitute significant deterrents to return, most notably including the limitation of insurance coverage to the district or Canton in which the insurance contributions are paid - deterring those who would otherwise be likely to return to their places of origin elsewhere. This renders even more urgent the requirements both for such transfers of coverage to be made possible, and also for the most crucial of the structural deficiencies within the health care system to be rectified – including the absence of any obligations on the part of the Canton Health Insurance Funds to transfer money to the Federation Fund. The absence of any such mechanism by itself would render inoperative any substantive attempt to come to an inter-Entity agreement regarding the transferability of health insurance coverage.

128 According to statements provided by the Deputy Director of the RS Health Fund, agricultural workers should pay around 16% of their annual income towards Health Care contributions. However, the average monthly contribution paid by farmers is only around DM/KM 2 – many contributions remain unpaid. The average annual medical costs incurred for these categories of insured persons are DM/KM 29.5. The Federation Health Fund currently has no such data for the other Entity.
In the immediate short term, however, and in the absence of the above measures, it would seem at the very least necessary to address, if not to alleviate, the strictures currently affecting the provision of emergency health care to those who require such treatment. As mentioned above, it would appear that those in such need are being denied even basic treatment, essentially due to resource limitations. Should it prove problematic to resolve the basic obstacles to the minimum proper functioning of the health care compulsory insurance scheme throughout BiH, then as a minimum, urgent efforts should be made to resolve those more accessible issues, including the provision of emergency health care to those in need, in line with current legal regimes.

UNHCR, in concert with other international actors and members of the International Community in BiH, has been supporting a number of initiatives designed to ease the difficulties encountered by both DPs and returnees in accessing health care. In particular, efforts are currently focused on enabling the signing of an agreement between the two Entities which would allow persons with health insurance to access health care services anywhere on the territory of BiH, regardless of their nominal place of insurance. While we remain hopeful that this situation will be remedied, it must similarly be borne in mind that the health care system in BiH will not be able to function properly until the other apparent gaps between the service commitments of the state and other structures, and the services provided to consumers are bridged.
PART II: CHRONIC DISEASES AND OTHER CONDITIONS – TREATMENT AND FOLLOW-UP

1. Introduction

While many of the legal, administrative and other constraints on the provision of health care services in BiH are detailed in the previous section, the second part of this study examines the health care system in Bosnia and Herzegovina from a purely medical point of view, reviewing the types of medical facilities that exist in the country, a number of basic difficulties with providing medical care and treatment for chronic diseases, as well as the capacity of the health care system in different areas to provide the specific treatment required for a number of these diseases.

It is perhaps not surprising to simply note that by and large the capacity of the health care system is unsatisfactory, and certainly cannot match the facilities available in Western Europe. What is of more concern, however, is that available evidence appears to indicate that current levels of treatment available are both below those that were possible before 1992. Of particular note is the widespread non-availability of many essential and basic medicines and treatments.

Contributory factors to the poor state of the health care system would appear to extend beyond both the complexity of the administrative and legal system, as well as the general shortage of facilities and other resources. Sub-optimal basic distribution and organisation of the resources that are available may also be considered important factors in this regard.

While we are confident that the detailed medical information contained in the following report will be of value to medical professionals, we hope that the report will also be of use to others interested in the state of the health care system in BiH.

2. Short Description of Health Care Levels of BiH

2.1 Primary Health Care

Primary health care is provided in the Ambulante (AMB), Domovi zdravlja (DZ), Hitne pomoci (HP), and Farmacia (PH). Primary health care is intended to cover 70-80% of all medical cases, but in reality only 10-20% of all cases are dealt with at this level.

2.1.1 Ambulanta – Basic Ambulatory Primary Health Care

One finds an Ambulanta in nearly every village. Usually a nurse does the daily work, with a General Practitioner (GP) often visiting once or more a week. In larger villages, the GP is available every day. Equipment is minimal, consisting of such basic items as a Riva-Rocci, stethoscope, and thermometer. Fields of work include anamnesis, clinical checks (i.e. non-invasive blood pressure, pulse rate, and

129 Figures provided by the Deputy Director of GH Brcko, and Head of Internal Medicine GH Zenica.
130 No data were available detailing the number of inhabitants required for a district to have an AMB, a permanently available GP or a DZ.
temperature), prescription of few drugs and referring patients to a DZ. Usually an AMB cannot refer patients directly to a hospital.

2.1.2 Dom zdravlje (House of Health) – Advanced Ambulatory Health Care

Dom zdravlje (DZs) are located in the main villages of each municipality, usually together with a Hitna pomoc (HP) and often connected to a Farmacia (PH) (see below). The staff of a DZ must include a GP, Epidemiologist, Occupational Physician, Gynaecologist (with obstetrics speciality), Paediatrician, a small lab and a small X-ray machine. Sometimes DZs are also equipped with ultrasound, endoscopy, advanced X-ray equipment and other facilities. However, the usage of this more sophisticated equipment also depends on the availability of specialists and items such as films, probes or ultrasound gel.

In some DZs one finds a Family Medicine Specialist and an Emergency Medicine specialist, although these are mostly located at HPs. Other specialists visit one to two times per week or month, and are either sent from hospitals or privately, depending on special contracts. These specialists can include Radiologists, Infectiologists, Internal Medicine specialists, Ophthalmologists, Enterology (ENT) specialists, Neuropsychiatrists, Pneumophysiologists, and Orthopaedic specialists, but providing these services are not compulsory. These visits, however, are dependent on personal connections, political power and organisational skills of the directors. No regulations could be found pertaining to mandatory provision of additional equipment.

Fields of work at DZs include ongoing triage for referrals, additional treatment (depending on available specialists and available equipment), prescription of some additional drugs, and transfers to secondary and tertiary health care centres, such as a General Hospital (GH) or Clinical Centre (CC). In certain cases, only a GH can transfer patients to a CC.

2.1.3 Hitna pomoc – First Aid and Emergency Medicine

An HP is a combined first aid centre, emergency room and transport centre, open 24 hours a day, seven days a week and usually located in a DZ. In big cities (e.g. Sarajevo), HPs are not co-located and have their own independent building and infrastructure. An HP can be visited by patients directly or can be called by phone. Normally a car or ambulance is sent and if available a nurse, medical technician, and/or doctor will be sent as well. The equipment of the ambulances is minimal and at best they are equipped with oxygen. Only a very few HPs have well-equipped emergency cars or ambulances (and usually these vehicles and equipment are donations). If accompanied by a doctor, he or she will usually carry basic medicines and other medical emergency material.

2.1.4 Farmacia – Pharmacy

There are state run pharmacies throughout BiH, as well as private pharmacies and some humanitarian pharmacies with stocks of drugs donated by international humanitarian organisations. State pharmacies are sometimes co-located with DZs, although often they are separate. They are supposed to support all local health care
facilities and patients with providing of basic materials (i.e. bandages, syringes or vials) and drugs. Humanitarian pharmacies can also be found at some DZs and GHs.

2.2 Secondary Health Care

Secondary health care within BiH is mainly provided at Bolnica, or General Hospitals (GH). Bolnice are usually located in the capitals of each Canton (Federation BiH), in each Region of the Republika Srpska (RS) and in the capital of Brcko District, although Canton 8 (West-Herzegovina) and Region 5 (Bosnia-Podrinje) are exceptions to this rule. GHs must have: Internal Medicine (common Internal Medicine, Nephrology – i.e. Dialysis centre, and Transfusiology), Surgery, Gynaecology/Obstetrics, Infectious Diseases (a speciality in BiH), Anaesthesiology (often a part of Surgery), Radiology (i.e. X-ray only in most cases), Laboratory (i.e. small routine lab and occasionally some additional tests such as Diff., TSH, fT3, fT4, and coagulation analysis). In most cases these requirements are met, but often the condition of the equipment is questionable. In larger cities or as a result of formerly being a larger hospital or war hospital, the GH may have additional departments (e.g. Paediatrics, Neurosurgery, Ophthalmology, and ENT) and additional equipment.

GH pharmacies get their stocks from state pharmacies and factories (Federation BiH), or from a Central Pharmacy (a state operated pharmacy specific to the RS).

2.3 Tertiary Health Care

Tertiary health care within BiH is provided mainly at Klinicki Centar or Clinical Centres (CCs), which are often associated with a University or other institution. CCs generally are located in the capitals and major cities. In BiH there are a number of such CCs, including two in the RS (in Banja Luka and Foca/Srbinje), and three in the Federation cities of Sarajevo, Tuzla, and Mostar.

CCs should have almost all specialities and necessary equipment and represent the top of health care in BiH. They are the institutions to which, in principle, all patients throughout the region should be referred when GHs are not in a position to provide the necessary expertise, diagnosis, or treatment.

3. Generally Problematic Aspects of Health Care Delivery in BiH

3.1 Physical-Environmental Condition

BiH is a mountainous country with many small and steep valleys. Only in the northern and western parts of the country does the terrain become more flat. Due to lack of money or lack of public transport, roughly 70% of all patients (even within big cities like Tuzla or Banja Luka) must walk to an AMB rather than travel by motor vehicle. In larger cities the time to the next AMB is usually less than in rural areas.

---

131 RS Regions are specified according to the areas of responsibility of Local Refugee Committees.
132 The Laws on Health Care specify what departments must exist in a GH. In Canton 9 (Sarajevo) the State Hospital (former Military Hospital) was defined as a GH on 01/07/00. Since that date, all treatments or check-ups performed, that are ascertained to be more specialised than the services legally specified as required in a GH have been considered as ‘private’, thus requiring patients to pay full price for these services. There is, however, no evidence that this practice has spread beyond Sarajevo.
133 “Assessment of Health Care Status of Patients seen at General Ambulatory Care” (See references).
Hence, the time required to physically access the health care location in the later could be much greater.

Roads in BiH are fit to the landscape and there are no highways, with the exception of a stretch north of Banja Luka and a newly constructed four-kilometre section at the entrance to Sarajevo from the Mostar road. Main roads that connect cities are in acceptable condition, but all other roads are in poor condition and have been damaged by natural and other forces. Small villages can often only be reached by gravel roads and some mountain villages cannot be accessed by roads. Ultimately, helicopter and other flights are not permitted without Stabilisation Force (SFOR) permission, thereby precluding a first aid helicopter system. Maintenance costs for any such system would be unsustainable.

The country’s climate can also hinder patient access to health care. The climate ranges from harsh winters to extremely hot summers with temperatures fluctuating within a range of 30 degrees Celsius in any one season. Due to the severity of weather conditions, mountain villages and some parts of larger cities often cannot be reached by car during winter.

3.2 Essential Drug Lists (EDLs) and Drug Availability

The World Health Organisation (WHO) EDL consists of about 250-300 drugs which should be available free of charge in all countries as a basic standard of treatment. In BiH, the WHO EDL has served as the basis for different EDLs for each Entity, and again as the basis for separate EDLs specific to some Cantons. Each EDL may again be reformed into what constitutes a Positive List (PL) (i.e. a list of drugs which must be on hand in state pharmacies or health care institutions and be either free of charge or require a small participation). The Federation EDL consists of about 160134 drugs and the RS PL of 105. In the Croatian-dominated part of Canton Seven (Herzegovina-Neretva), the PL consists of 76 drugs. In the Bosnian-dominated area of the same Canton, the PL consisted of 68 drugs. Canton Four (Zenica-Doboj) has a PL consisting of 82 drugs, Canton Five (Bosnia-Podrinje) has a PL consisting of 70 drugs and Canton Nine (Sarajevo) consisted of 98 drugs. Neither a PL or EDL exists for Canton One (Una-Sana) and the Brcko District.

It should be noted that the various EDLs and PLs are generally not functional; often drugs placed on these lists can only be obtained by paying full price.

4. Availability of Imaging Diagnostics

In general, the more sophisticated the facilities required, the more problems are encountered when obtaining imaging diagnostics. In the table below, figures for Austria are provided as a comparison.

Imaging diagnostic facilities:

<table>
<thead>
<tr>
<th>Service</th>
<th>RS</th>
<th>Federation BiH</th>
<th>Brcko District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scintigraphy/100000 inhabitants</td>
<td>0.0625</td>
<td>0.32(^{135})</td>
<td>0</td>
</tr>
<tr>
<td>CT/100000 inhabitants</td>
<td>0.0625-0.125</td>
<td>0.36-0.41</td>
<td>0</td>
</tr>
<tr>
<td>NMRT/100000 inhabitants</td>
<td>0</td>
<td>0.045-0.09</td>
<td>0</td>
</tr>
</tbody>
</table>

Patients in need of imaging diagnostics often have to travel several hours to get to an examination point and often must pay full costs. The more scarce the facility, the longer the transport time, greatly increasing the probability that patients will not get the check-ups required. This situation is further exacerbated by transport costs and the absence of inter-Entity and inter-Cantonal insurance agreements.

Map 2 (see appendix) indicates the distribution of Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) facilities in BiH.

### 4.1 X-Rays

#### 4.1.1 Common X-rays

Common x-rays can often be obtained free of charge in all DZs and hospitals. Fields of work in DZs include thoracic and skeleton X-rays, X-ray-scropy and X-ray-graphy with contrast media.

Equipment in use varies in age, ranging from brand new (e.g. DZ Mrkonic Grad, DZ Gacko, DZ Posusje and DZ Siroki Brijeg) to more than 15 years old (e.g. GH Trebinje, GH Zvornik, GH Sarajevo).

#### 4.1.2 Mammography

Mammography is not part of routine examinations in BiH. The presence of necessary specialities and equipment needed for mammography has been mentioned at GH Bihac, CC Mostar West, and CC Sarajevo (Federation); GH Doboj, GH Trebinje, and CC Banja Luka (RS); and GH Brcko (Brcko District), however, this has not been confirmed.\(^{136}\)

#### 4.1.3 Phlebography

Phlebography cannot be done in DZs, but in larger hospitals (e.g. CC Sarajevo, CC Tuzla, CC Banja Luka and GH Doboj), this may be accomplished.

#### 4.1.4 Films

Films are usually available, but in Gacko the DZ has to purchase films and patients are required to participate in costs.

---

\(^{135}\) The exact number of cameras was not obtainable. Estimates ranged from 6 to 8.

\(^{136}\) Conflicting responses regarding the availability of mammography were received from the Directors of CC Srbinje (Region Six), GH Trebinje (Region Seven), GH Doboj (Region Two) and DZ Gacko (Region Seven).
4.1.5 Contrast Media

This issue is usually not a difficulty, but permanent availability can be problematic in some areas.

4.2 Scintigraphic Imaging

Scintigraphic cameras in BiH:

<table>
<thead>
<tr>
<th></th>
<th>No. of cameras</th>
<th>No. of working cams.</th>
<th>Costs for patients</th>
<th>Films /Isotopes perm. avail.</th>
<th>Problems mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC Banja Luka</td>
<td>1</td>
<td>1</td>
<td>Unknown</td>
<td>Y/Y</td>
<td>None</td>
</tr>
<tr>
<td>CC Tuzla</td>
<td>Unknown</td>
<td>Unknown but working</td>
<td>Unknown</td>
<td>N/Y</td>
<td>Lack of money</td>
</tr>
<tr>
<td>GH Zenica</td>
<td>2</td>
<td>2</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>CC Mostar-West</td>
<td>Unknown</td>
<td>Unknown but working</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>CC Sarajevo</td>
<td>Unknown</td>
<td>Unknown but working</td>
<td>Unknown</td>
<td>Y/Y</td>
<td>Unknown</td>
</tr>
<tr>
<td>GH Sarajevo</td>
<td>1</td>
<td>1</td>
<td>Unknown</td>
<td>Y/Y</td>
<td>Old apparatus</td>
</tr>
</tbody>
</table>

4.3 Computed Tomography (CT)

These facilities are only available at GHs and CCs\(^{137}\).

CTs in BiH:

<table>
<thead>
<tr>
<th></th>
<th>No. of apparatus</th>
<th>No. of working app.</th>
<th>Costs for patients</th>
<th>Films perm. avail.</th>
<th>Other problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC Banja Luka</td>
<td>1</td>
<td>0(^{138})</td>
<td>Unknown</td>
<td>Y</td>
<td>Technical support deficient</td>
</tr>
<tr>
<td>Private Hospital Milici</td>
<td>1</td>
<td>0</td>
<td>Unknown</td>
<td>Unknown</td>
<td>“never installed”(^{139})</td>
</tr>
<tr>
<td>CC Srbinje</td>
<td>1</td>
<td>1</td>
<td>PCP</td>
<td>Y</td>
<td>Unknown</td>
</tr>
<tr>
<td>GH Bihac</td>
<td>1</td>
<td>0(^{140})</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Lack of support</td>
</tr>
<tr>
<td>CC Sarajevo</td>
<td>5</td>
<td>1(^{141})</td>
<td>KM50-80(^{142})</td>
<td>N</td>
<td>Contrast media, small parts</td>
</tr>
<tr>
<td>GH Sarajevo</td>
<td>2(^{143})</td>
<td>2</td>
<td>Unknown</td>
<td>Not for the spiral CT(^{144})</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

\(^{137}\) There are private CT facilities available, but patients are required to pay full price for their use.

\(^{138}\) At the time of writing, this CT facility was out of order. UNHCR was informed that there is only one technical specialist for these machines in BiH.

\(^{139}\) This machine was part of a Dutch donation made two years ago, but was never installed. It is not indicated on Map 2.

\(^{140}\) Out-of-order, as in Banja Luka.

\(^{141}\) This is a new General Electric spiral CT. The others in Sarajevo are 10, 12, and 15 years old respectively. There is also a 15 year old mobile CT bus.

\(^{142}\) Conflicting information was received regarding the precise amounts patients are required to pay for this service.

\(^{143}\) 1 of these is a new Siemens spiral CT. The other is quite old, but still functional.

\(^{144}\) Kodak CT film packs for the spiral CT (1 pack = 125 films) are too expensive (KM 1200).
<table>
<thead>
<tr>
<th>Area of BiH</th>
<th>Where to go</th>
<th>Transport time</th>
<th>Costs without transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region 1</td>
<td>Belgrade</td>
<td>5 hours</td>
<td>Big PCP or FP</td>
</tr>
<tr>
<td>Region 2</td>
<td>(Banja L.) Belgrade</td>
<td>4 hours</td>
<td>Big PCP or FP</td>
</tr>
<tr>
<td>Region 3</td>
<td>Belgrade</td>
<td>3 hours</td>
<td>Big PCP or FP</td>
</tr>
<tr>
<td>Region 4</td>
<td>Belgrade/Srbinje</td>
<td>3.5-5 hours</td>
<td>Big PCP or FP/Unknown</td>
</tr>
<tr>
<td>Region 5</td>
<td>Srbinje</td>
<td>1.5 hours</td>
<td>Unknown</td>
</tr>
<tr>
<td>Region 7</td>
<td>Podgorica$^{149}$ or Srbinje</td>
<td>2-3.5 hours</td>
<td>Unknown</td>
</tr>
<tr>
<td>Canton 1</td>
<td>Sarajevo</td>
<td>5 hours</td>
<td>Unknown, probably KM80</td>
</tr>
<tr>
<td>Canton 2</td>
<td>Tuzla</td>
<td>1.5 hours</td>
<td>Unknown</td>
</tr>
<tr>
<td>Canton 5</td>
<td>Sarajevo/Srbinje</td>
<td>1-2 hours</td>
<td>KM80/Unknown</td>
</tr>
<tr>
<td>Canton 6</td>
<td>Mostar-West</td>
<td>2-3 hours</td>
<td>KM22</td>
</tr>
<tr>
<td>Canton 7</td>
<td>Sarajevo</td>
<td>1.5-4 hours</td>
<td>KM80</td>
</tr>
<tr>
<td>Canton 8</td>
<td>Mostar-West</td>
<td>1 hour</td>
<td>Unknown$^{150}$</td>
</tr>
<tr>
<td>Canton 10</td>
<td>Mostar-West</td>
<td>1-3 hours</td>
<td>Unknown</td>
</tr>
<tr>
<td>Brcko District</td>
<td>Belgrade/ Tuzla</td>
<td>3 hours/ 1 hour</td>
<td>Big PCP or FP/ Unknown</td>
</tr>
</tbody>
</table>

$^{145}$ Information from Deputy Director of GH Mostar-East.
$^{146}$ 1 new Siemens spiral CT, 1 Toshiba 19 years old.
$^{147}$ According to all persons interviewed in the RS, special contracts have been made between the RS and FRY Serbia/Belgrade for provision of CT scans. Apparently, however, as social and economic problems increase in Serbia, the amounts requested by Belgrade for these services have also increased dramatically, in some cases amounting to full price.
$^{148}$ Travel time is extended due to the very mountainous landscape surrounding and bad roads leading to Srbinje.
$^{149}$ There is a ‘special contract’ with FRY/Montenegro for this service to be provided in Podgorica.
$^{150}$ CC Mostar-West is covered by specifically ‘Croat’ health insurance; non-Croats may thus be required to pay full price.
4.4 Magnetic Resonance Imaging (MRI)

MRI in BiH:

<table>
<thead>
<tr>
<th>Facility</th>
<th>No. of apparatus</th>
<th>No. of working app.</th>
<th>Costs for patients</th>
<th>Films perm. avail.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC Sarajevo</td>
<td>2</td>
<td>1</td>
<td>KM80/KM490(^{151})</td>
<td>Unknown</td>
</tr>
<tr>
<td>CC Mostar-West</td>
<td>1</td>
<td>0(^{152})</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

4.5 Ultrasound (US)

US is available in many hospitals and DZs. Usually, US is used only for abdominal and gynaecological examinations. US for glandules and other small body parts is very rare.

4.5.1 Breast US

Breast US is available in DZ Mrkonic Grad and in GH Doboj. If patients from these areas are suspicious, they are referred to CC Banja Luka.

4.5.2 Heart US

See below.

4.6 Endoscopy

Endoscopy is available even in small DZs, although not operational on a daily basis.

Endoscopy Offered Free of Charge – Data from Questionnaires:

<table>
<thead>
<tr>
<th>RS</th>
<th>FBiH</th>
<th>Breko District</th>
</tr>
</thead>
<tbody>
<tr>
<td>GH Kasindol – Srpska Sarajevo</td>
<td>GH Zenica</td>
<td>GH Brcko</td>
</tr>
<tr>
<td>DZ Teslic – partially FOC</td>
<td>GH Gorazde</td>
<td></td>
</tr>
<tr>
<td>GH Gradiska</td>
<td>DZ Bugojno</td>
<td></td>
</tr>
<tr>
<td>DZ Gradiska</td>
<td>GH Travnik</td>
<td></td>
</tr>
<tr>
<td>CC Banja Luka – partially FOC</td>
<td>the Hosp. Travnik</td>
<td></td>
</tr>
<tr>
<td>DZ Zvornik</td>
<td>CC Mostar-West</td>
<td></td>
</tr>
<tr>
<td>CC Srbinje</td>
<td>DZ Kupres</td>
<td></td>
</tr>
<tr>
<td>GH Trebinje</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{151}\) KM 80 (PCP) for patients of Canton 9, KM 490 (FP) for others.

\(^{152}\) Recently purchased, but not installed so far.
Endoscopy Data from Visits:

<table>
<thead>
<tr>
<th>Procedure</th>
<th>RS</th>
<th>FBiH</th>
<th>Brcko District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastroscopy</td>
<td>CC Banja Luka&lt;sup&gt;153&lt;/sup&gt;</td>
<td>GH Bihac&lt;sup&gt;154&lt;/sup&gt;</td>
<td>GH Brcko</td>
</tr>
<tr>
<td></td>
<td>GH Doboj</td>
<td>CC Tuzla</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GH Zvornik</td>
<td>GH Zenica</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC Srbinje&lt;sup&gt;155&lt;/sup&gt;</td>
<td>GH Mostar-East</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GH Trebinje</td>
<td>CC Mostar-West</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DZ Siroki Brijeg</td>
<td>CC Sarajevo&lt;sup&gt;156&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GH Sarajevo</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GH Livno</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colonoscopy</td>
<td>CC Banja Luka</td>
<td>GH Bihac</td>
<td>GH Brcko</td>
</tr>
<tr>
<td></td>
<td>GH Doboj</td>
<td>CC Tuzla</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GH Zvornik</td>
<td>GH Zenica</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC Srbinje</td>
<td>GH Mostar-East</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GH Trebinje</td>
<td>CC Mostar-West</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC Srbinje</td>
<td>GH Sarajevo</td>
<td></td>
</tr>
<tr>
<td>Bronchoscopy</td>
<td>CC Banja Luka</td>
<td>CC Tuzla</td>
<td>GH Brcko</td>
</tr>
<tr>
<td></td>
<td>GH Doboj</td>
<td>Hosp. Travnik</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GH Zvornik&lt;sup&gt;157&lt;/sup&gt;</td>
<td>GH Mostar-West</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC Srbinje</td>
<td>CC Mostar-West</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC Sarajevo</td>
<td>GH Sarajevo</td>
<td></td>
</tr>
<tr>
<td>ERPC&lt;sup&gt;158&lt;/sup&gt;</td>
<td>CC Banja Luka</td>
<td>CC Tuzla</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GH Doboj</td>
<td>CC Mostar-West?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC Srbinje</td>
<td>CC Sarajevo</td>
<td></td>
</tr>
</tbody>
</table>

Patients in the DZ Mrkonic Grad area (Region One) are referred to CC Banja Luka to obtain an endoscopy and then refused access at this location. At other times, the staff of CC Banja Luka visit the DZ, bring the necessary equipment, and require patients to pay KM50-100<sup>159</sup> for an endoscopy.

---

<sup>153</sup> According to the Director of DZ Mrkonic Grad, all endoscopy biopsies must be paid for by patients.
<sup>154</sup> According to the Head of Gynaecology, GH Bihac, the machine is not functioning and is in need of repair.
<sup>155</sup> According to the Director of CC Srbinje, patients are required to pay a participation of approximately 20 KM for all types of endoscopy procedures. According to the Deputy Director of GH Trebinje, CC Srbinje does not have a gastroenterology department. Patients from Region Seven with special endoscopic problems are therefore referred to Belgrade and not to Srbinje.
<sup>156</sup> According to an unnamed doctor from the Gastroenterology Department, CC Sarajevo, patients that cannot walk are carried to endoscopic and other facilities as the building lacks an elevator.
<sup>157</sup> According to the Deputy Main Nurse, GH Zvornik, a specialist from CC Banja Luka visits once per month.
<sup>158</sup> Endoscopic Retrograde Pancreatipo-Cholangiography.
<sup>159</sup> Figure provided by the Director of DZ Mrkonic Grad.
4.7 Histopathology

Pathology departments exist in all CCs and in some GHs. Biopsies are not universally taken, often despite the presence of endoscopic facilities.\textsuperscript{160} The following participation observations have been noted:

RS:

Participation costs for Histopathology in CC Banja Luka, GH Doboj, CC Srbinje and GH Trebinje may be far above normal, sometimes entailing as much as 60% of the total costs. GH Trebinje has taken steps to provide a pathology department, however their facility is not yet fully functional. The actual number of pathologists in the RS is unknown.

Federation:

Facilities for histopathology are present in GH Bihac, CC Tuzla, GH Zenica and CC Sarajevo. Consistent availability of staff, however, is problematic. Department Heads and Directors of these hospitals and centres have mentioned that pathologists are available, if at all, once or twice per week. All related procedures are also not universally available. For example, kidney biopsies cannot be examined at GH Zenica.

At CC Sarajevo, every patient who is to be examined by the pathology department must pay KM50 in advance. If this payment is not made the pathology department will refuse to analyse the sample. According to the Director of CC Tuzla, patients must pay full price for hormone receptor analysis.

5. Specific Diseases and Conditions, Care and Treatments

5.1 End Stage Renal Disease (ESRD)

ESRD is treated throughout BiH\textsuperscript{161} with centres located all over the country. Nonetheless, End Stage Renal Disease treatment is not maintained and cannot be maintained at its current level.

Dialysis Centres and Machines in BiH:

<table>
<thead>
<tr>
<th></th>
<th>RS</th>
<th>Federation BiH &amp; Brcko District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dialysis centres</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Dialysis centres/100000 inhabitants</td>
<td>0.625</td>
<td>0.45</td>
</tr>
<tr>
<td>Dialysis machines</td>
<td>91</td>
<td>135</td>
</tr>
<tr>
<td>Dialysis machines/100000 inhabitants</td>
<td>5.7</td>
<td>6.1</td>
</tr>
</tbody>
</table>

\textsuperscript{160} This is often because of a lack of auxiliary equipment (for biopsy) or because of an absence of transport facilities (for infectious materials).

\textsuperscript{161} It should be noted that BiH – especially the north-eastern part – is a centre of endemic Balkan nephritis.
Map 2 indicates the locations of dialysis centres in BiH (see appendix). This map does not imply that the level of care for End Stage Renal Disease in BiH is adequate.

5.1.1 Anaemia and Osteoporosis Non-Prevention

Severe anaemia is prevalent (RBC 2.0-2.3 in 100% of visited centres; patients from abroad: >> 3.0) and osteoporosis is also common in BiH. Moreover, the patient has to pay full price for erythropoetin (6 ampoules: KM600) and calcitriol. In addition, these two drugs are not always available.

5.1.2 Dialysis Solution

The use of bicarbonate as a dialysis solution is not a consistent practice throughout BiH.\(^{162}\) This results from the use of dialyzers that are more than ten years old and can only be used with acetate. Exceptions to this trend exist in CC Sarajevo, CC Tuzla and GH Trebinje where more than 80% of the machines use bicarbonate.

5.1.3 Single Use Materials

The lack of single use materials is problematic. Plasters to fix the canulas and tubes are often unavailable.

5.1.4 Kidney Transplantation

If there are no contra-indications, every patient must be prepared for kidney transplantation and placed on a waiting list. Transplantation can be performed in the State Hospital Sarajevo, Kosevo CC Sarajevo and CC Tuzla. However, given that there is no connection to the Eurotransplant system, only family donors\(^{163}\) are accepted and patients must pay full price (KM8,000-10,000). There have been instances reported of patients travelling to India\(^{164}\) for transplants, as the combined cost of the travel and operation is less than having it done in BiH or because the patient has no local donor.

5.2 Diabetes Mellitus (DM)

According to the law, all patients should receive treatment and check-ups for DM free of charge throughout BiH. Unfortunately, this is not always the case for many patients and DM treatments are not adequately maintained. In the Federation, the situation is somewhat better than that in the RS and Brcko District, but the availability of drugs, necessary insulin, syringes, needles, pens and vials is not guaranteed. Metformin is not available free of charge in BiH.

\(^{162}\) The solution (A Acetate, B Bicarbonate, AB both) was found to be used in the following dialysis centres: CC Banja Luka AB, GH Doboj AB, GH Zvornik AB, GH/CC Srbinje A, GH Trebinje B, CC Tuzla AB, GH Zenica AB, CC Sarajevo AB, GH Brcko A). There was no data available for: GH Bihac, GH Travnik, GH Livno, GH Prijedor, GH Gradiska, GH Bijeljina, GH Kasindol; Dialysis Centres Tesanj, Samac, Drvar.

\(^{163}\) According to the Director of GH Sarajevo and the Chief of Cabinet of CC Sarajevo, the use of cadaveric organs is currently not regulated by law, and so is not possible. However, even were such procedures legally permissible, the associated costs would continue to pose a significant problem.

\(^{164}\) As related by the Director of GH Doboj.
5.2.1 Glibenclamid

Glibenclamid is available throughout BiH. In the RS, initial patients receive it free of charge while at hospitals and DZs depending on available stocks. Following discharge, patients must pay full price. In the Federation, the Cantons have different laws, levels of implementation, and budget situations. Inconsistent drug lists hamper general access to oral antidiabetics. Glibenclamid is available free of charge in Cantons Four, Five, Six, Seven, and Nine of the Federation. At times, Glibenclamid can be obtained free of charge in Canton Ten, while it is not available free of charge in Canton Three. In Cantons Two and Eight, the situation regarding the cost of Glibenclamid is not clear.

5.2.2 Metformin

Metformin is difficult to obtain in BiH. Where patients do receive it, they are required pay full price.

5.2.3 Insulin

Insulin is available throughout BiH; however not all of the usual kinds and mixtures of normal, medium acting and long acting insulin are consistently available. In Doboj (RS Region Two) and Zvornik (RS Region Four), it has been reported that patients have been required to buy insulin in private pharmacies (FP) as the RS did not receive the usual delivery of insulin from FRY (apparently FRY was out of stock).

Throughout BiH, pens, vials, test strips and devices for self-monitoring of blood glucose are dependent on donations and stocks of humanitarian pharmacies or must be purchased at full price. Diabetes self-management education (medical nutrition therapy and physiologically based insulin regimes) is sporadic and generally ineffective.

5.2.4 Fasting Blood Plasma Glucose Tests

Fasting Blood Plasma Glucose Tests are available in all DZs, but only within working hours of the lab. Hospitals offer these tests 24 hours a day, seven days a week. HbA1c can be measured only in CCs and some of the larger GHs (Doboj, Zvornik).

5.2.5 Ophthalmological Checks

Information obtained would indicate that ophthalmologists can be found throughout BiH (at some DZs and all hospitals).

5.2.6 Children's and Adolescents DM

This group of patients utilise the same facilities, but require much more intensive treatment than adult patients. Treatment should be provided by teams that can deal with the special medical, educational, nutritional and behavioural issues of the complicated physical and emotional growth needs of children and self-management

165 Approximately three quarters of all newly diagnosed cases of IDDM occur in individuals younger than 18 years (according to American Diabetes Association, see sources).
education should begin at the time of initial diagnosis. As DM treatment is ineffective for adults, the dangers of long-term complications (as well as for acute complications) for this specific group are much more significant.

5.3 Chronic (Obstructive) Pulmonary Diseases (COPD)

The quality of treatment and continuous follow-up for Chronic (Obstructive) Pulmonary Disease often varies, depending on the place of residence (which can determine the availability of spirometry and blood gas analysis). The typical drug problem also exists in regards to this illness. Treatment is not adequate in Cantons One, Two, Three, Six, Seven, Nine, Ten, the RS and the Brcko District (one or more WHO-EDL drugs are missing). Oxygen for self-management of severe dyspnea is not available.

5.3.1 Spirometers and Blood Gas Analysers (BGA)

Spirometers and BGAs are available throughout BiH, however, the ratio of distribution appears unclear. Very few DZs appear to have spirometers. While check-ups are free of charge should equipment be available, as most DZs do not have spirometers, patients must travel to the next facility with the necessary equipment. BGAs are accessed free of charge an equipment is very rare.

Medical Facilities with Spirometers and BGAs in BiH:

<table>
<thead>
<tr>
<th>Type of Equipment</th>
<th>RS</th>
<th>Federation BiH</th>
<th>Brcko District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spirometer</td>
<td>GH Kasindol, GH Prijedor, GH Gradiska, DZ Gradiska, CC Banja Luka, DZ Mrkonic Grad, DZ Modrica, DZ Derventa, DZ Doboj, GH Doboj, DZ Samac, GH Zvornik, DZ Gorazde, CC Srbinje, DZ Rudo, GH Trebinje</td>
<td>GH Bihac, DZ B. Krupa, DZ Orasje, DZ Gradaca, CC Tuzla, GH Zenica, GH Gorazde, DZ Bugojno, Tbc-hospital Travnik(^ {166} ), CC Mostar-West, DZ Siroki Brijeg, CC Sarajevo, GH Sarajewo, GH Livno, DZ Livno, DZ Kupres</td>
<td>DZ Brcko</td>
</tr>
<tr>
<td>BGA</td>
<td>GH Kasindol, GH Gradiska, DZ Gradiska, CC Banja Luka, GH Doboj, CC Srbinje</td>
<td>GH Orasje, CC Tuzla, GH Zenica, DZ Gorazde, DZ Bugojno, Tbc-hospital Travnik, CC Mostar-West(^ {167} ), CC Sarajevo, GH Sarajevo</td>
<td>GH Brcko</td>
</tr>
</tbody>
</table>

\(^{166}\) Canton 6 (Central Bosnia) has – besides a GH – a specialised hospital for pulmonal diseases (especially Tuberculosis).

\(^{167}\) Information provided by the Head of Internal Medicine Department. This facility is reported to be routinely denied to non-Croats.
Medical facilities apparently without Spirometers and BGAs in BiH:

<table>
<thead>
<tr>
<th>Type of Equipment</th>
<th>RS</th>
<th>Federation BiH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spirometer</td>
<td>DZ Teslic, DZ Prijedor, DZ Banja Luka, DZ Visegrad, DZ Gacko</td>
<td>GH Oraše, DZ Gorazde, DZ Kiseljak, GH Travnik, DZ Travnik, DZ Stolac, DZ Posusje, DZ Glamoc</td>
</tr>
<tr>
<td>BGA</td>
<td>DZ Teslic, GH Prijedor, DZ Prijedor, DZ Banja Luka, DZ Mrkonic Grad, DZ Modrica, DZ Derventa, DZ Doboj, DZ Samac, GH Zvornik, DZ Gorazde, DZ Visegrad, DZ Rudo, GH Trebinje, DZ Gacko</td>
<td>GH Bihac, DZ B. Krupa, DZ Oraše, DZ Gradacac, GH Gorazde, DZ Kiselnjak, GH Travnik, DZ Travnik, DZ Stolac, DZ Posusje, DZ Siroki Brijeg, GH Livno, DZ Livno, DZ Kupres, DZ Tomislavgrad, DZ Glamoc</td>
</tr>
</tbody>
</table>

No data was available on institutions not mentioned.

5.3.2 Self-Management of Severe Dyspnoea

Oxygen cylinders for home use by patients are unavailable as confirmed by survey.\(^{171}\)

5.3.3 Antiobstructives and Related Drugs\(^{172}\)

Antiobstructives and related drugs are usually listed on most PLs, however, they are generally unavailable. If such drugs are mentioned, often none of these are drawn from the WHO EDL. In Cantons Four and Five, all WHO EDL suggestions are listed. The PLs from both the Croat-dominated and Bosniac-dominated parts of Canton Seven are missing ipratropium and antihistaminic. The PLs of the RS and Canton Nine do not list ipratropium. The PL of Canton Two is missing cortisone, ipratropium and antihistaminic, while the Canton Three PL lacks antihistaminic as well. The PL of Canton Six does not list ipratropium. At Canton Ten, DZ Tomislavgrad is missing antihistaminics and cortisone, DZ Livno is missing all bronchospasmolytics, while the list of DZ Kupres is complete. The reasons for these discrepancies remains unclear.

5.4 Cardiovascular Diseases

5.4.1 Pacemaker Treated Bradycardia

Facilities for treatment of Pacemaker (PM) Treated Bradycardia are lacking and when available, are very expensive. This is caused by rare facilities, very high costs, and lack of equipment.

---

\(^{168}\) Apparatus out of order.

\(^{169}\) According to the Director of GH Zvornik; confirmed by deputy main nurse, as visited.

\(^{170}\) Analyzer unreliable according to Cantonal MoH.

\(^{171}\) A number of returned survey questionnaires indicated positive answers to this question, although follow-up visits appeared to indicate some confusion between the availability of oxygen cylinders for home use and the provision of this therapy within the health care institution.

\(^{172}\) A minimum of these have been selected, in accordance with the WHO EDL: Theophyllin, salbutamol (or comparable), ipratropium, an antihistamine, cortisone. Epinephrine is part of the emergency drug equipment within HP doctors’ backpacks, and is not available for out-patients.
PM facilities in BiH:

Telemetry/Programming\textsuperscript{173}

<table>
<thead>
<tr>
<th>Company</th>
<th>Availability</th>
<th>Coverage of Children</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitatron</td>
<td>CC Sarajevo</td>
<td>Y</td>
<td>FOC</td>
</tr>
<tr>
<td>Biotronic</td>
<td>CC Banja Luka, CC Srbinje\textsuperscript{174}</td>
<td>N, (referred to Belgrade)</td>
<td>FOC, FOC</td>
</tr>
<tr>
<td>Medtronic</td>
<td>None</td>
<td>N</td>
<td>Unknown</td>
</tr>
<tr>
<td>Pace Setter</td>
<td>CC Tuzla\textsuperscript{175}, CC Banja Luka</td>
<td>N, Unknown</td>
<td>FOC, FOC</td>
</tr>
</tbody>
</table>

Implantation:

<table>
<thead>
<tr>
<th>Company</th>
<th>Location of Implantation</th>
<th>Coverage of Children</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitatron</td>
<td>CC Sarajevo</td>
<td>Y</td>
<td>30% PCP\textsuperscript{176} = KM1300</td>
</tr>
<tr>
<td>Biotronic</td>
<td>CC Banja Luka, CC Srbinje</td>
<td>N, (referred to Belgrade)</td>
<td>PCP or FP\textsuperscript{177}, 20% PCP = KM1040\textsuperscript{178}</td>
</tr>
<tr>
<td>Medtronic</td>
<td>None</td>
<td>N</td>
<td>Unknown</td>
</tr>
<tr>
<td>Pace Setter</td>
<td>CC Tuzla</td>
<td>N</td>
<td>PCP depends on type\textsuperscript{179}</td>
</tr>
</tbody>
</table>

Patients from parts of the RS in proximity to FRY are referred to Belgrade hospital (check-ups require participation, implanting is to be paid in full, i.e. KM6000). According to the Staff of GH Trebinje, patients are referred to Belgrade (six hours drive) or Banja Luka (five hours drive) and not to Srbinje (three hours drive) because Srbinje just began this treatment and cannot effectively cover the need. Croat persons are referred to Croatia (Split), while Bosniac children with PM problems (Vitatron) or one in need of implanting can be treated in BiH, provided cost issues are overcome.

Adequate levels of post-implantation care for Pacemaker Treated Bradycardia are not maintained. The main problem is the cost of re-implantation, although there is also a distinct problem regarding Medtronic PMs, in that they cannot be checked in BiH.

\textsuperscript{173} Telemetry/ Programming is available for newer models (adults), according to 100% of visits and received info.

\textsuperscript{174} According to Director of CC Srbinje they have just started to provide this speciality, but will be unable to continue it due to financial constraints.

\textsuperscript{175} According to the Head of Thoracic Surgery, CC Sarajevo, CC Tuzla uses Pacesetter devices only.

\textsuperscript{176} Information provided by the Head of Thoracic Surgery, CC Sarajevo.

\textsuperscript{177} There appeared to be some confusion as to whether patients were required only to participate in the costs of this treatment, or to pay the full price.

\textsuperscript{178} Information from the Director of CC Srbinje.

\textsuperscript{179} According to the Head of Thoracic Surgery, CC Sarajevo, who is responsible for PM implanting and check-ups at this CC, patients must pay full price in CC Tuzla (4000-4500KM).
5.4.2 Cardiac Weakness, Coronary Heart Disease, Arrhythmia and High Blood Pressure

If not too severe\textsuperscript{180}, treatment for heart weakness or failure is available. The more drugs required for an individual patient, the higher the probability that a drug will not be available or will not be free of charge. Lack of heart ultrasound facilities is also a problem, as well as the fact that Transoesophagal Heart Ultrasound (TEE) is not available.

Coronary heart disease treatment and follow-up of simple cases can be maintained at current levels. Necessary drugs are currently available at the moment, although there are difficulties connected with the provision of heart ultrasound. Severe cases, requiring close-meshed check-ups and/or invasive techniques (i.e. coronary angiography) are not treatable. If patients do not reside near to large medical/population centres, the chance of surviving an acute myocardial infarction is very low.

Follow-up for Arrhythmia is problematic and the probability of receiving access to Holter monitoring is very low. Only patients who live very close to adequate medical centres have this possibility.

One or two different drugs of each group of antihypertensive medicines from the WHO EDL (i.e. betablockers, calcium antagonists, and ACE blockers) are readily available in BiH. As a result, high blood pressure can be treated in BiH. However, there are problems with diagnosis and follow-up. Riva-Rocci Holter monitoring is also not available in BiH. Therefore, cases which are not complicated can be treated, but difficult cases that need continuous check-ups and multiple changes of therapy and drugs cannot be assured treatment.

5.4.3 Heart Ultrasound

Heart Ultrasound can be performed at CC Banja Luka, GH Doboj, GH Zvornik, CC Tuzla, DZ Siroki Brijeg, GH Sarajevo and CC Sarajevo\textsuperscript{181}. TEE is not available in BiH because the necessary equipment is too expensive.

5.4.4 Ergometry

Ergometry can be performed in many DZs and in all hospitals. It should be possible for all patients to obtain this treatment relatively near their homes if all transport and other difficulties can be overcome.

5.4.5 Lysis

For information on Lysis see Coagulation Related Diseases.

\textsuperscript{180} New York Heart Association (NYHA) Classification I-II.
\textsuperscript{181} According to an unnamed source at GH Bihac, the contract of the single cardiovascular specialist capable of performing this examination was terminated by a newly-appointed Head of Internal Medicine (who is also reported to be politically powerful locally).
5.4.6 Holter Electrocardiography (ECG) Monitoring

Holter ECG Monitoring is permanently available only at CC Banja Luka, GH Doboj, CC Srbinje, CC Tuzla, GH Zenica, CC Mostar-West, GH Sarajevo and CC Sarajevo.

5.4.7 Holter Blood Pressure Monitoring

Holter Blood Pressure Monitoring is not available in BiH.

5.4.8 Cardiovascular Drugs\(^\text{182}\)

Cardiovascular drugs are listed on all PLs, but in different quantities, kinds and groups. Usually they are free of charge or require a small participation fee. Common diseases related to this topic, if not too severe, can be treated in BiH. But on the other hand, due to budget cuts and the precarious situation of the health care system, this may become problematic in the near future.

5.4.9 Blood Level of Digitalis Glycosides

Digoxin can be obtained only in CCs. Digitoxin is not obtainable anywhere in BiH and is not included on any PL.

5.5 Coagulation Related Diseases

5.5.1 Coagulation Screening

Coagulation analysis screening (TPZ = Quick, aPTT, platelets) can be performed everywhere except in DZs Rudo, Gacko, Gorazde and Stolac. While available at GH Zvornik, patients have to pay full price. No data was available for DZ Modrica, GH Livno, DZ Livno, DZ Kupres, DZ Tomislavgrad and DZ Glamoc.

5.5.2 Drugs Affecting Coagulation\(^\text{183}\)

The availability of drugs affecting coagulation varies throughout BiH. According to the different PLs of the RS, the Federation and Cantons, the situation is as follows:

<table>
<thead>
<tr>
<th>PL</th>
<th>Drugs Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS:</td>
<td>Two Cumarin derivatives</td>
</tr>
<tr>
<td>Federation BiH</td>
<td>ASS, Cumarin, Heparin and factor VIII + IX</td>
</tr>
<tr>
<td>Canton 1</td>
<td>PL is non-existent</td>
</tr>
<tr>
<td>Canton 4</td>
<td>ASS and Cumarin.</td>
</tr>
<tr>
<td>Canton 7</td>
<td>Cumarin</td>
</tr>
<tr>
<td>Canton 7 (Croat</td>
<td></td>
</tr>
<tr>
<td>dominated part)</td>
<td>Nothing</td>
</tr>
<tr>
<td>Canton 9</td>
<td>Cumarin</td>
</tr>
</tbody>
</table>

\(^{182}\) Including antianginal, antiarrhythmic, antihypertensive drugs and drugs used in heart failure.

\(^{183}\) According to the WHO EDL this list should include: Acetylsalicylic acid, desmopressin, heparin sodium, phytonenadione, protamine sulphate, cumarin (warfarin or phenprocoumon). Also mentioned are streptokinase for acute lysis of thrombo-embolism and factor VII + IX for substitution in case of bleeding caused by Haemophilia VIII or IX.
The following drugs affecting coagulation can be obtained free of charge: Heparin sodium in Cantons Five, Six, and Ten; ASS in Cantons Three, Four, Six, Seven, and Ten; Cumarin in Cantons Six, and Seven; and Low-dose heparin in Cantons Seven and Ten (only in DZ Kupres, not in DZ Tomislavgrad).

Follow-up treatments for embolisms are not available. Cumarins are available free of charge only in the RS and Canton Six. The availability of free cumarins are very doubtful and in Canton One, Canton Two, Canton Three, Canton Five, the Croat-dominated part of Canton Seven, and Canton Ten they are not available at all. None of the suggested drugs listed in the WHO EDL are universally available.

5.5.3 Streptokinase, Clinical and Pre-Clinical Lysis

Clinical lysis is performed in all CCs. The concept of pre-clinical lysis, which is usually performed by emergency doctors, is not generally understood in BiH.

5.5.4 Haemophilia

Availability of treatment for haemophilia is dependent on area of residence. For example, in cases of acute bleeding needing substitutions of coagulation factors or blood plasma, patients would need to reside close to larger hospitals in order to receive satisfactory treatment. Substitution cannot be done in DZs or smaller hospitals and patients cannot count on fast emergency transport.

5.6 Anaemia

Patients with hypoferric anaemia may receive appropriate treatment and medication, except in the Southern RS. Treatment for other forms of anaemia is not available.

A basic blood count may be conducted in all DZs and hospitals. Complete blood counts are conducted in DZs Posusje, Siroki Brijeg, Kiseljak and Mrkonjic Grad, as well as in all hospitals.

5.6.1 Hypoferric Anaemia

Hypoferric Anaemia can be diagnosed and treated in BiH. Costs for ferrous salt require participation (KM2-4). In South-eastern RS, availability of this medicine is problematic.

5.6.2 Vitamin B 12 Deficiency and Folic Acid Deficiency Anaemia

Drugs for these conditions are not readily available and participation is up to KM8.

5.7 Hyper-and Hypothyreosis

Treatment for thyroid diseases is not available. Only patients living in Cantons Three, Four, Six, Nine and the Bosniac-dominated portion of Canton Seven may be able to
receive follow-up and treatment. It should be noted that Radio Iodine Therapy is difficult to obtain.

5.7.1 Lab Screening

Lab screening (TSH, fT3 and fT4) is available as follows:

TSH, fT3, fT4 in BiH

<table>
<thead>
<tr>
<th>RS:</th>
<th>Federation BiH:</th>
<th>Can be performed in:</th>
<th>Blood sample can be sent from / to</th>
</tr>
</thead>
<tbody>
<tr>
<td>GH Kasindol</td>
<td>GH Prijedor / Banja Luka</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC Banja Luka</td>
<td>GH Trebinje / Podgorica</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GH Doboj</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GH Zvornik</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC Srbinje</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC Tuzla</td>
<td>DZ Gradacac / Tuzla</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GH Zenica</td>
<td>DZ Gorazde</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DZ Bugojno</td>
<td>GH Travnik / Sarajevo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DZ Travnik</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC Mostar-West</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GH Mostar-East</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC Sarajevo</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GH Sarajevo</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**No data was available for Canton Ten.**

5.7.2 Thyroid Hormones and Antithyroid Drugs

Drugs Listed on PLs of the Entities and Brcko District:

<table>
<thead>
<tr>
<th></th>
<th>RS</th>
<th>Federation BiH</th>
<th>Brcko District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levothyroxine</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Potassium iodide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thiamicol(^{185})</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
</tbody>
</table>

Drugs Available Free of Charge (FOC) According to Filled DLs and Cantonal PLs:

<table>
<thead>
<tr>
<th>DE</th>
<th>VI</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>C5</th>
<th>C6</th>
<th>C7W</th>
<th>C7E</th>
<th>C8</th>
<th>C9</th>
<th>C10</th>
</tr>
</thead>
<tbody>
<tr>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

DE=Derventa (Region Two), VI=Visegrad (Region Six)

**Due to apparent conflicts in DLs, the situation in Canton Ten remains unclear.**

\(^{185}\) Or propylthiourazil.

\(^{186}\) According to the Director of DZ Siroki Brijeg and the Director of DZ Posusje, provision of these drugs (points surrounded by brackets) should not be a problem, although this was not confirmed.
5.7.3 Radio Iodine Therapy

Patients must pay full price for Radio Iodine treatment\textsuperscript{187} at CC Tuzla. In GH Zenica, the situation is unclear regarding the availability of treatment. Patients from Canton Six are referred to Zenica or Sarajevo. Radio Iodine Therapy is available free of charge in CC Mostar-West, primarily to Croat patients. Other patients must obtain treatment at CC Sarajevo. Radio Iodine Therapy is not available in the RS. Patients are referred to Belgrade or Novi Sad in FRY. In the Brcko District, patients are referred to Belgrade or Tuzla. Costs of treatment are unknown.

5.8 Malignant Diseases

Treatment for cancers and leukaemia is not adequate. Cytostatics, in many cases (especially in the RS), are not provided free of charge; radiotherapy in BiH is only available for certain persons, the need for palliative and pain therapy is far greater than can currently be addressed; and the necessary diagnostic procedures are not available due to equipment non-availability, expense, or location.

5.8.1 Chemotherapy

Stationary Therapy:

Stationary Therapy is available only in larger centres (CC Banja Luka, CC Tuzla and CC Mostar-West). Specialists from these centres visit other GHs to prescribe courses of treatment. Severe cases are referred to the CCs. Patients from the South-eastern RS are generally referred to FRY (Belgrade). Health care professionals do try hard to cover patient needs, but costs are increasing exponentially, as budgets are being reduced. Therefore, even insured patients are required to purchase cytostatics\textsuperscript{188}.

Out-Patient Therapy:

Besides the fact that all patients with malignant diseases are covered by Compulsory Insurance and Cytostatics are listed on all PLs (albeit in different quantity and selection), there are two issues which are increasingly becoming problematic. First, chemotherapeutic drugs required are not permanently available. Second, even though drugs are listed on the PLs, patients are often required to pay for these very expensive drugs.

5.8.2 Radiotherapy

For Radiotherapy treatment, all RS patients are referred to Belgrade. Patients of Bosniac-dominated areas of the Federation are referred to CC Sarajevo, and patients from Croat-dominated areas of the Federation are referred to Split or Zagreb. The decision of whom to refer abroad is made by Doctors Commissions, however, the decision making process is unclear. In Sarajevo, treatment is free of charge for the time being, but available funds for this treatment are decreasing.

\textsuperscript{187} According to the Director of CC Tuzla.
\textsuperscript{188} According to the Head of Oncology at CC Banja Luka, 1400 stationary and 6000 out-patients were treated in 1999. Only 5\% of these were not insured.
5.8.3 Follow-up

Follow-up depends on the type of malignant disease and usual check-ups involve imaging diagnostics, endoscopy, histopathology and lab tests, especially tumor markers (or antigenes).

5.8.4 Tumor Antigens

Tumor antigenes can be determined in all CCs and some GHs (Kasindol, Zvornik and Sarajevo). These facilities all have the necessary technology, but due to the lack of funds, they often cannot afford the necessary reagents. As a result, they cannot fully cover the costs and charge the patient KM15 for each test.

5.8.5 Palliative and Pain Therapy

Every patient with malignant disease may suffer from pain and other chronic symptoms during all stages of the disease. The patient may require treatment for months, years, or even permanently (see below for details).

5.9 Chronic Diseases of the Intestines

The probability is minimal of receiving adequate treatment and follow-up for intestinal diseases. Even as endoscopic check-ups are available in many health care institutions, budgetary constraints and technical limitations negatively affect diagnosis and treatment. Any patient that is subject to the possibility of severe aggravation or malignant growth (e.g. ileitis terminalis, colitis ulcerosa and adenomatosis coli) will be at risk, especially in rural areas.

5.10 Special Pain Therapy and Palliative Medicine

This medicinal concept is not understood or practised in BiH. Only one out-patient care centre exists and is found at GH Sarajevo. This centre is located within the Department of Surgery, is headed by an anaesthesiologist and was only opened two years ago. It should be noted that palliative and pain therapy is not only of important for patients with malignant diseases, but is often valuable for patients with chronic, non-malignant pain syndromes as well.

Due to recent demographic changes in BiH (including the resettlement of many younger Bosnians to Western Europe, North America and Australia), the percentage

---

189 CEA, CA 19-9, CA 15-3, CA 125, SCC, AFP, HCG and PSA were requested.
190 CEA, CA 19-9.
191 CEA, PSA, AFP.
192 RS hospitals sometimes forward samples to FRY Serbia, Federation BiH hospitals in Croat-dominated areas sometimes forward samples to Croatia. The question of payment for these services remains open.
193 According to the Director of GH Sarajevo and the Head of Oncology at CC Sarajevo, a pack of 100 test kits costs around KM 1,500. Patients are charged for each test.
194 An Irish NGO (Palliative Home Care) is also currently operating in Sarajevo, with 2 doctors and 3 nurses who visit patients in need of palliative care and pain therapy at home. This programme, however, cannot be considered sustainable.
of elderly people is increasing\textsuperscript{195} and hence the percentage of patients with severe chronic pain is increasing.

5.10.1 Morphines in BiH

Morphine is only available in ampoules for injection. The RS PL includes sustained release morphine tablets, but throughout BiH it is nearly impossible to get these drugs. In the Federation, morphine is regulated by Entity legislation.\textsuperscript{196} Storage of this drug is permitted in GHs, CCs and state pharmacies only. Permission is not granted to DZs and AMBs. PHs, which theoretically may also have permission, generally do not stock morphines because they are afraid of robbery and complexities of record keeping regarding narcotic drugs.

The listing of sustained release morphine tablets on the RS PL however, can only be considered nominal. Evidence indicates that these tablets are not widely available in the RS.

5.10.2 The Value of Quality of Life

The value placed set on the quality of life seems relatively low. Prevailing attitudes noted by Hospital Directors, Health Ministers, and the World Bank Health Focal Point regarding the mood of people in BiH may reflect a reason for the lack of palliative and pain therapy in BiH.

5.11 Diseases of Big Joints and/or Spine, and Disability

5.11.1 Physical Therapy

Physical therapy can be found in all hospitals. In many DZs, a specialist is present for out-patients at least once per week. The main obstacle to adequate provision of physical therapy is the lack of drugs, especially if diseases are connected with chronic pain.

5.11.2 Joint Replacements

Hip Replacement:

Hip replacements can be performed in many hospitals, especially the larger ones. Availability is influenced by whether cemented or cement-free hip prostheses are to be implanted, but is more dependent on the financial capacity of the patients. Patients have to pay up to 50\% of the total cost (KM1,000 – 2,000). In GH Zenica, the operation appears reasonably priced, but the exact cost is unknown.

Knee Replacement:

Knee replacements are very rare. Costs are as high or higher than for hips and patients are charged for this procedure.

\textsuperscript{195} Census Report 1990-1998, Federation BiH.
\textsuperscript{196} Confirmed by the Deputy Ministry of Health for Canton Sarajevo.
Shoulder Replacement:

   **Shoulder replacements may be performed in GH Zenica or CC Sarajevo.**

5.11.3 Advanced Spine Surgery

For spine surgeries, procedures are generally only available for discus herniation and not for malignant growths and severe kyphoscoliotic disorders. The later may be available in CC Sarajevo.

5.11.4 Rheumatic Diseases

Treatment for Rheumatic diseases is hampered in BiH by the lack of drugs necessary for the treatment of these types of diseases.

5.12 Mental Traumata and Neuropsychiatric Disorders

These disorders causing loss of jobs and friends, family problems and even suicide must be taken into consideration. In BiH, most neurologic and psychiatric departments have been merged\(^{197}\) and this can lead to dangerous inter-patient incidents.\(^{198}\) As a result, the health care situation regarding mental trauma and neuropsychiatric disorders is unsatisfactory.

Also, the probability of receiving effective treatment for Neurosis, Psychosis, Epilepsy, Encephalitis disseminata, Depression, and Parkinson’s Disease is low. This results from non-separated neurologic and psychiatric wards, problems with drug availability and lack of specialised attention.

5.12.1 Post-Traumatic Stress Disorder (PTSD) and Mental Health Care (MHC)

The specific treatment and care of mentally traumatised people is unmanaged. It is maintained mainly by Non-governmental Organisations (NGOs)\(^ {199}\) whose involvement is not guaranteed over time.

Stationary treatment for PTSD can only be found in CC Sarajevo, however, psychiatric specialists recognise this group of patients and out-patient therapy is offered in many hospitals and DZs once or twice per week.

\(^{197}\) In addition to financial and educational problems, this non-separation may also be due to bureaucratic shortcomings. It has been reported, for example, that the head of neuropsychiatry in GH Bihac simply refuses to split his department, despite having been advised to do so.

\(^{198}\) An (unconfirmed) case was related at the CC Sarajevo, in which a schizophrenic patient raped a paraplegic woman. He was able to approach the neurologic ward as there are no lockable doors between the 2 departments.

\(^{199}\) See “Non-Governmental Psycho-Social or Psychiatric Support in BiH” (UNHCR, 02/2000).
Stationary MHC and Therapy for PTSD:

<table>
<thead>
<tr>
<th>Area where MHC may be available</th>
<th>% of visited health care institutions with specialised stationary MHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS Sokolac (Region 5) Modrica (Region 2)</td>
<td>0</td>
</tr>
<tr>
<td>Federation BiH Unknown</td>
<td>0</td>
</tr>
<tr>
<td>Brcko District Unknown</td>
<td>0</td>
</tr>
</tbody>
</table>

Of all visited health care institutions, not one had a specialised MHC department for stationary therapy. Attempts to create such departments or wards remain unsuccessful. For example, a donation of one million DM was made to create a mental health care centre, but under immense political pressure by local authorities, a normal DZ was rebuilt. 201

5.12.2 Psychotropic and Neurologic Drugs

The problems associated with the availability of these specific drugs are similar to the problems associated with the availability of other drugs.

**Drugs of WHO-EDL and Modified DLs Available in BiH:** 202

<table>
<thead>
<tr>
<th>Drugs listed on PLs</th>
<th>Drugs available free of charge 203</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbamazepine</td>
<td>• • • • • • • • • • • • • •</td>
</tr>
<tr>
<td>Lamotrigin</td>
<td>• • • • • • • • • • • • • •</td>
</tr>
<tr>
<td>Diazepam</td>
<td>• • • • • • • • • • • • • •</td>
</tr>
<tr>
<td>Clonazepam</td>
<td>• • • • • • • • • • • • • •</td>
</tr>
<tr>
<td>Ethosuximide</td>
<td>• • • • • • • • • • • • • •</td>
</tr>
<tr>
<td>Magnesium sulphate</td>
<td>• • • • • • • • • • • • • •</td>
</tr>
<tr>
<td>Phenobarbital</td>
<td>• • • • • • • • • • • • • •</td>
</tr>
<tr>
<td>Phenytoin</td>
<td>• • • • • • • • • • • • • •</td>
</tr>
<tr>
<td>Valproic acid</td>
<td>• • • • • • • • • • • • • •</td>
</tr>
</tbody>
</table>

200 Data provided by the Director of DZ Mrkonic Grad and the Deputy Main Nurse GH Zvornik.
201 Information provided by the Head of Internal Medicine, CC Mostar-West.
202 There is no PL in either Brcko District or Canton One.
203 According to DLs and Cantonal PLs.
204 According to the Main Nurse at the humanitarian pharmacy in DZ Visegrad, patients may currently obtain drugs from humanitarian stock free of charge. If the drug is unavailable, however, patients are required to pay full price at state pharmacies.
205 No DL was received from Canton 8. According to the Director of DZ Posusje psychiatric patients who are used to taking haloperidol and thioridazin will be unable to obtain these drugs in the area. Such patients have been reported to be unable to adapt to different drug regimens, and there have been reports of such cases ending up ‘on the streets’.
206 Information from the DL of DZ Tomislavgrad. According to information received from DZ Livno, however (also Canton 10) this list is much more restrictive: only biperidene and diazepam are mentioned. This discrepancy could not be resolved.
207 Or Natrium valproinate.
<table>
<thead>
<tr>
<th></th>
<th>DE</th>
<th>V1</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>C5</th>
<th>C6</th>
<th>C7</th>
<th>C8</th>
<th>C9</th>
<th>C10</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASS</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Ergotamine</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Metoclopramide</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Promethazine</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Paracetamol</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Sumatriptan</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Propanolol</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Biperiden</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Levodopa</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Baclofen</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Chlorpromazine</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Chlorpromazine</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Fluphenazine</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Amitryptiline</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Lithium carbonate</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Clomipramine</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

DE = Derventa (Region 2), VI = Visegrad (Region 6)

5.12.3 Migraines

Treatment and follow-up is available for simple cases of migraines, however, treatment is hampered by drug availability. Severe (level III) migraine cases cannot be treated because triptanes and special pain/cephalea therapies are not maintained.

5.13 Hydrocephalus

Patients in need of a replacement of part or all of a cerebro-peritoneal shunt must pay a participation cost of 30% (i.e. KM700 to 2,000 in CC Sarajevo). In CC Tuzla, patients have to pay full price\(^\text{211}\), however, an exact cost unknown. When compared with Sarajevo, full price could be as much as KM2,000 to 7,000.

6. Pregnancy

The general conditions under which a woman must deliver can further illustrate the overall health care conditions in BiH.

Delivery occurs in all hospitals and nearly all DZs. Women giving birth at DZs are usually discharged a few hours following delivery because DZs do not offer stationary therapy. The delivery room at a DZ typically includes one or more delivery chairs or beds. If multiple beds are present, they are not separated by curtains or walls. This allows delivering women to be together and provides the obstetrical staff with a general overlook. Expectant fathers must wait outside. In BiH, operation-theatres,

\(^{208}\) Instead of or additionally: Klozapine, Sulpiride, Thioridazine.

\(^{209}\) Additionally in the PL of Canton 7-West: Methylphenobarbital, Klozapine

\(^{210}\) Additionally in PL of Canton 7-East: Klozapine, Sulpiride, Fluoxetin.

\(^{211}\) Information as related by the Director of CC Tuzla.
which usually should be separated from other operation rooms, are used in conjunction with other surgical specialities.

Cardiotopography (CTG) can be found sporadically throughout BiH and the distribution is not based on need. For example, at CC Sarajevo (2500 births per year) and at DZ Kiseljak (200 births per year) there is only one CTG per facility, while at GH Trebinje (700 births per year) there are two CTGs.

Separated Delivery Beds, Separated Caesarean Section OPs, CTGs in Institutions Visited with Obstetrics:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Separated Beds</th>
<th>Separated OPs</th>
<th>CTG</th>
<th>Working CTGs/Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC Banja Luka</td>
<td>Y</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DZ Mrkonic Grad</td>
<td>N/A (only 1 bed)</td>
<td>N/A</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>GH Doboj</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>GH Zvornik</td>
<td>N/A (only 1 bed)</td>
<td>N</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>CC Srbinje</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>GH Trebinje</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>2/2</td>
</tr>
<tr>
<td>DZ Gacko</td>
<td>N/A (only 1 bed)</td>
<td>N/A</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>GH Bihać</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>1/1</td>
</tr>
<tr>
<td>CC Tuzla</td>
<td>Y (boxes)</td>
<td>Unknown</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>GH Zenica (not seen)</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>DZ Kiseljak</td>
<td>Y</td>
<td>N/A</td>
<td>Y</td>
<td>1/1</td>
</tr>
<tr>
<td>GH Mostar-East</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>CC Mostar-West (not seen)</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>CC Sarajevo</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>1/1</td>
</tr>
<tr>
<td>GH Sarajevo</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>2/Unknown</td>
</tr>
<tr>
<td>GH Livno</td>
<td>N</td>
<td>Unknown</td>
<td>Y</td>
<td>1/1</td>
</tr>
<tr>
<td>Brcko District</td>
<td>GH Brcko</td>
<td>Y</td>
<td>Unknown</td>
<td>Y</td>
</tr>
</tbody>
</table>

7. **Children's Diseases**

7.1 **Children's Diabetes Mellitus**

See above at DM section.

7.2 **Newborn Hip Dysplasia**

US screening for Newborn Hip Dysplasia depends on the child’s place of birth and on the clinical experience of the examining paediatrician. Screening may be performed in most hospitals if the necessary equipment is on hand. If born at a DZ, the child is usually referred for US screening if the paediatrician suspects complications.

---

As related by a gynaecologist at CC Sarajevo, the facilities of the Gynaecology/Obstetrics Department were totally destroyed during the war, and the unit was subsequently moved to the former Ophthalmological Department. At the Obstetrics Department, women awaiting delivery may share 1 bed. There is 1 bathroom for 35 patients. In the delivery room there are 4 beds, with a distance of 1.5m between them, without curtains.

---

212 As related by a gynaecologist at CC Sarajevo, the facilities of the Gynaecology/Obstetrics Department were totally destroyed during the war, and the unit was subsequently moved to the former Ophthalmological Department. At the Obstetrics Department, women awaiting delivery may share 1 bed. There is 1 bathroom for 35 patients. In the delivery room there are 4 beds, with a distance of 1.5m between them, without curtains.
A new-born hip screening program for the Federation, initiated by the Orthopaedic Department Of CC Sarajevo\textsuperscript{213}, may exit in the planning stage.

7.3 Atopic Dermatitis

Common paediatric examinations and therapies should be available for Atopic Dermatitis. However, necessary medications and psychological help for patients and their parents are scarce.

7.4 Children's Asthma

\textbf{Cromoglicic acid is not listed on any PL.}

7.5 Screening for Phenylketonuria and Neuroblastoma Multiforme

Screenings for Phenylketonuria and Neuroblastoma Multiforme are not available in BiH.

8. Infectious Diseases

8.1 HIV and AIDS

Antiretroviral drugs are not available in BiH. Ziduvudin (AZT, Retrovir\textsuperscript{®}), however, is included on the Federation PL. Specialised lab facilites (i.e. CD4/CD8-ratio) and centres are also unavailable.

8.2 Tuberculosis

Antibacterial chemotherapy is maintained throughout BiH. Antituberculotics are free of charge in Canton One (Una-Sana), which lacks a PL.

9. First Aid and Emergency Medicine

The Hitna Pomoc system as described above is well organised. The problems facing first aid and emergency medicine are lack of funds and the dependency on donations for well equipped emergency cars and ambulances.\textsuperscript{214} Due to these considerations, basic resources, including ambulances, are in extremely short supply, especially outside urban centres. When terrain and other factors affecting transport are taken into account, in addition to the relative scarcity of vehicles (less than 1 vehicle per 100,000 inhabitants), it is unsurprising that it can take up to 3 hours for an emergency vehicle to arrive on-site following a call, if one is available.

\textsuperscript{213} Information related by the Head of Orthopaedics at CC Sarajevo.

\textsuperscript{214} A 'well-equipped' ambulance may be said to contain: an ECG monitor, defibrillator, respirator & intubation stuff, aspirator, vacuum mattress, shovel stretcher, oxygen, emergency drugs & infusions, glucose test strips and bandages, at a minimum. This list is, however, non-exhaustive.
10. Conclusion

Part Two of this study has provided a detailed, if necessarily incomplete, snapshot portrait of the state of the health care system in BiH from a medical perspective. It has included an overview of the institutional structure of health care delivery in BiH, as well as a review of a number of chronic diseases, and of the extent to which the necessary treatments for these illnesses are available to the local population in BiH.

While some of the impediments to providing quality health care stem from the terrain and transportation problems within and across the country, and so can to a degree be treated as ‘givens’, others may be considered more complex, including the difficulties reportedly encountered by minority returnees and other residents in accessing Secondary and Tertiary-tier health care facilities in certain areas. The continued phenomenon of large-scale internal displacement may in fact contribute towards the perpetuation of such practices – as local resources are stretched by the needs of a displaced population temporarily residing in any one area of coverage, the likelihood may increase of minority groups being denied access to essential health care services. Given this consideration, it may be worth noting that returns from abroad of persons in need of such care may not only put a chronically-ill returnee at risk, but may also further jeopardise the precarious supply of medical treatment currently available to the local population in any given area, whether in their place of origin or in displacement.

Moreover, as is apparent from the above study, there is also a certain degree of confusion among health care professionals working in BiH, even within the very institutions supposed to provide health care, as to the treatment facilities available to care providers. Given the administrative complexity of the health care system, it is perhaps unsurprising that there is such confusion, as well as a reticence to provide health care to those who may be able to access services elsewhere.

Such confusion aside, however, the lack of essential resources is perhaps the most basic impediment to the effective functioning of the health care system in BiH in its current institutional form. These shortages range from a lack of advanced technological facilities in the country to the general non-availability to much of the population of basic drugs from the WHO Essential Drug List.

It may simply be stated that the health care system in BiH is not capable of meeting the needs of the country’s population and that the overall state of the health care system is worse than in 1992. More concerning, however, is the finding that persons suffering from many illnesses 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 BiH. The non-availability of a number of treatments may be life threatening in certain cases.

This last, however, is not to say that the return to BiH of persons who are currently abroad should not be encouraged and facilitated. Rather, in order to ensure the continued treatment of persons suffering from chronic or potentially life-threatening illnesses, the possibilities for repatriation of such individuals should be considered only on an case-by-case basis, and with full consideration given to the possibilities for such persons of accessing satisfactory health care in their place of return. A thorough
assessment of these possibilities should include not only whether the necessary drugs or treatment facilities are available in a person’s place of origin, but also whether or not a person would be able to access these facilities should they be available given the legal and administrative system surrounding health care provision, as well as any other factors that may affect their possibilities for treatment.

Given these impediments to adequate health care provision in BiH, it is perhaps redundant to state that the most obvious shortcomings are systemic and structural in nature – stemming from an over-complex and bureaucratic administrative/legal system, as well as from a basic lack and poor distribution of essential resources. Nonetheless, it should be noted that until such time as these basic problems are corrected – whether through the introduction of a single BiH-wide system of health care insurance and provision, raising the resource levels available to health care providers, or through other means – it will not be possible to ensure adequate levels of health care in BiH for those persons in need.
ANNEXES

1. List of Selected Relevant Laws and Regulations

Note: The list below is updated to June 2001, but remains non-exhaustive. Most regulations listed in the body of the study, however, are included in this list.

Bosnia and Herzegovina

- The Law on Immigration and Asylum of Bosnia and Herzegovina (BiH Official Gazette no. 23/99)
- The Law on Refugees from BiH and Displaced Persons in BiH (BiH Official Gazette no. 23/99)

Republika Srpska

- Law on Health Insurance (Republika Srpska Official Gazette no. 18/99).
- Law on Health Care (Republika Srpska Official Gazette no. 18/99)
- Decree on the Work of the Out-Patient Clinic of Family Medicine (Republika Srpska Official Gazette no. 14/99);
- Decision on Plan of Net of Health Care Institutions (Republika Srpska Official Gazette no. 26/93);
- Decision on Participation of Insured Persons in the Costs for Use of Health Care (Republika Srpska Official Gazette no. 11/99);
- RS Law on Changes and Amendments to the Law on Contributions (Republika Srpska Official Gazette nos. 2/95, 15/96, 23/98, 13/00 and 29/00).
- Decision on the Establishment of a Positive List of Medicines (Republika Srpska Official Gazette no. 34/00);
- Decision on Determination of National List of Essential Medicines (Republika Srpska Official Gazette no. 34/00);
- Decision on Determination of National List of Essential Medicines (Republika Srpska Official Gazette no. 31/98);
- Decision on Increasing Prices of Health Services (Republika Srpska Official Gazette no. 11/99 and 45/00);
- Decision on Determination of the Positive List of Medicines (Republika Srpska Official Gazette no. 34/00);
- Order on Determination of Categories of Persons Who are not Obliged to Participate in the Costs for Use of Health Care Services (Republika Srpska Official Gazette no. 45/00);
- Law on Employment (Republika Srpska Official Gazette no. 38/00);
- Instruction on Method of Calculating and Payment of Contributions (Republika Srpska Official Gazette no. 44/00);
- Conclusion of the RS National Assembly made on 24 October 2000 (Republika Srpska Official Gazette no. 38/00);
- Decision on Establishment of the Institute for Medicine of Work and Sport of the RS (Republika Srpska Official Gazette no. 39/00);
- Law on Displaced Persons, Refugees and Returnees in Republika Srpska (Republika Srpska Official Gazette no. 33/99);
Federation

- Federation Law on Health Care (Federation BiH Official Gazette no. 29/97);
- Federation Law on Health Insurance (Federation BiH Official Gazette no. 30/97);
- Instruction on the Contents and the Form of the Health Card (Official Gazette Federation no. 11/2000);
- Instruction on the Method on Registration and Deregistration of the Insured Person to/from Obligatory Insurance (Federation BiH Official Gazette no. 11/00);
- Decision on Determination of Temporary Standards and Normative of Health Care from Compulsory Health Insurance (Federation BiH Official Gazette no. 21/00);
- Decision on Accepting the List of Essential Medicines Applied the Territory of Federation (Federation BiH Official Gazette no. 28/00). This Decision contains the List of Essential Medicines applied in Federation BiH which is at the same time defined to be the List of Positive Medicines in all Cantons.
- Law on Displaced-Expelled Persons and Refugees–Returnees in the Federation (Federation BiH Official Gazette no. 19/00);
- Law on Contributions (Federation BiH Official Gazette no. 35/98 and 54/00)
- Instruction on the Method of Calculation and Payment of Contributions (Federation BiH Official Gazette no. 37/98, 49/98 and 55/00).
- Decree on Paying Contributions for Persons Employed for the First Time (Federation BiH Official Gazette no. 48/00)
- Law on Basis of Social Welfare, Protection of Civil War Victims and Protection of Families with Children (Federation BiH Official Gazette no. 36/99)
- Decision imposing the Law on the Job Placement and Social Security of the Unemployed taken by the High Representative (Federation BiH Official Gazette no. 55/00)

Sarajevo Canton

- Law on Social Welfare, Protection of Civil War Victims and Protection of Families with Children (Sarajevo Canton Official Gazette no. 16/00);
- Decision on Establishing the Public Institute for Public Health Sarajevo Canton (Sarajevo Canton Official Gazette 4/99); issued based on Article 88, Federation BiH Law on Health Care.
- Decision on Individual Participation of Insured Persons in the Costs of Use of Health Care and Payment of Cost of Medical Treatment in the Territory of Sarajevo Canton (Sarajevo Canton Official Gazette no. 11/00);
- Decree on the Scope of Rights of Insured Persons to Use Orthopaedic and Other Devices, Endoprosthesis, Dental-Prosthesis Assistance (Sarajevo Canton Official Gazette no. 7/99); issued based on Article 33, Federation BiH Law on Health Insurance.
- Decision on Basis and Rates of Contributions for Compulsory Health Insurance in Sarajevo Canton. (Sarajevo Canton Official Gazette no. 11/00);
- Decision on Adopting the Net of Health Institutions in the Territory of Sarajevo Canton (Sarajevo Canton Official Gazette no. 14/00);

Brcko District
• Agreement on the Implementation of the Entity Obligations from the Final Arbitration Award for Breko on Health Care and Health Insurance, dated 24 October 2000.

2. References

WHO, http://www.who.int


MSF, http://www.msf.org

US Centre for Disease Control, http://www.cdc.gov


OEBIG (Österreichisches Bundesinstitut für Gesundheitswesen), Austrian Federal Institute for Health Care, http://www.oebig.at (under construction)

Austrian Society for Nephrology, Dialysesta Standard 1993

German Association for Clinical Nephrology and the German Association for Paedriatic Nephrology


DGSS (Deutsche Gesellschaft zum Studium des Schmerzes), German Society for Pain Research, http://www.medizin.uni-koeln.de/projekte/dgss/bedarf.html

An Assessment of Health Care and Health Status of Patients Seen at General Practice Ambulatory Care Centres in Bosnia and Herzegovina, March 1999, Goodwin et al., Family Medicine Centre Kingston, Ontario, Canada

Non-Governmental Psycho-Social or Psychiatric Support in BiH, UNHCR BiH report, 02/2000


Study on the Value of Medical Devices in Germany, Institut für Gesundheitsökonomie, Neubauer et al., 06/2000
3. **A Note on Methodology Employed for Part II of this Study**

In order to obtain a general overview of the health care situation in BiH, a list of diseases and treatments to be examined was drawn up. A questionnaire regarding these diseases and treatments and a drug list to measure availability were formulated, and site visits to various health care institutions were performed during the summer of 2000. The list of diseases and treatments was established based upon the experience of the research team and individual cases from a UNHCR database. Several medical colleagues involved in private practices and hospitals in urban and rural areas were then asked to confirm, adjust, or question the compiled list of diseases and treatments. This list was non-exhaustive and, similar to the study itself, should be seen only as an overview.

The questionnaire was formulated to include general data (inhabitants, area, driving distances, number of different health care centres, doctors, pharmacies, etc.), as well as more specific data relating to individual diseases and treatments. Common explanatory notes were included to make it easier to understand the objective of the study and to conduct the interviews. Drug availability was determined by providing health care professionals with a simplified version of the WHO Essential Drug List to compare with available stocks. This list was modified by deleting medicines which are not used in treating chronic diseases and by adding drugs commonly used for palliative care and pain therapy, as well as digitoxin (renal disease) and odansetron (chemotherapy). The questionnaires and drug lists were then distributed to UNHCR Field and Satellite Offices for forwarding to recipients. Interviews were conducted face to face, while drug lists were given to local (public) pharmacies to be filled in by pharmacists. Data for tables resulting from responses to interviews, questionnaires and drug lists that were unclear, or where data was not available, were recorded as “unknown.”

CCs, GHs, DZs, AMBs, and HPs throughout BiH were visited by the research team in order to obtain more detailed information and to provide feedback to the health care focal points. Detailed medical interviews were conducted with doctors and nurses, as well as appraisals of several health care facilities, wards and pharmacies. Various types of medical devices and equipment were also examined. In addition to on-site visits, general country and health care data for BiH was obtained from various governmental and non-governmental health care related agencies, as well as web-based research from the WHO and US Centre for Disease Control.

4. **Maps**

(See following pages.)
Locations of Interviews, Visits, and Drug Lists Received

Map 1

FBiH CANTONS:
1. Una-Sana
2. Posavina
3. Tuzla
4. Zenica-Doboj
5. Bosnia-Podrinje
6. Central Bosnia
7. Herzegovina-Neretva
8. West-Herzegovina
9. Sarajevo
10. Herzeg-Bosnia

RS REGIONS:
1. Banja Luka
2. Doboj
3. Bijeljina
4. Vlasenica
5. Sokolac
6. Srbinja
7. Trebinje

Note:
Regions in RS are specified according to competence areas of Local Refugees Committees

Legend:
- BIH Border
- Canton/Region Border
- IEBL
- Municipal Border
- Visits
- Received Drug Lists
- Received Questionnaires
- 50 km Airline Distance
Map 2

Locations and Distributions in BiH of Dialysis Centres, Computed Tomography Scanners and Magnetic Resonance Imaging Scanners

**FBiH CANTONS:**
1. Una-Sana
2. Posavina
3. Tuzla
4. Zenica-Doboj
5. Bosnia-Podrinje
6. Central Bosnia
7. Herzegovina-Neretva
8. West-Herzegovina
9. Sarajevo
10. Herzeg-Bosnia

**RS REGIONS:**
1. Banja Luka
2. Doboj
3. BiH Cantons
4. Tuzla
5. Zenica-Doboj
6. Bosnia-Podrinje
7. Central Bosnia
8. Herzegovina-Neretva
9. Sarajevo
10. Herzeg-Bosnia

**LEGEND:**
- BiH Border
- Canton/Region Border
- IEBL
- Municipal Border
- 50 km Airline Distance
- Dialysis Centres
- CT operating
- CT out of order
- MRI operating
- MRI not yet installed

Note:
Regions in RS are specified according to competence areas of Local Refugees Committees