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Report No: PAD3988

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT
ON A
PROPOSED LOAN

IN THE AMOUNT OF EUR 67.3 MILLION
(USD 75 MILLION EQUIVALENT)

TO

BOSNIA AND HERZEGOVINA

FOR A

HEALTH SYSTEMS IMPROVEMENT PROJECT

March 17, 2022

Health, Nutrition and Population Practice
Europe and Central Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective January 31, 2022)

Currency Unit =	
1 EUR=	1.1159 USD
1 USD=	0.8961 EUR

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Anna Bjerde
Country Director:	Linda van Gelder
Regional Director:	Fadia Saadah
Practice Managers:	Tania Dmytraczenko, Roby Senderowitsch
Task Team Leaders:	Ian Forde, Carlos Marcelo Bortman, Simon Carl O'Meally

ABBREVIATIONS

AKAZ	Agency for Accreditation and Health Care Quality in Federation of Bosnia and Herzegovina
ALOS	Average length of stay
ASKVA	Agency for Certification, Accreditation and Health Care Quality Improvement in Republika Srpska
BAM	Bosnia-Herzegovina Convertible Mark
BiH	Bosnia and Herzegovina
COVID-19	Coronavirus Disease 2019
CPD	Continuing Professional Development
CPF	Country Partnership Framework
CVD	Cardiovascular disease(s)
DA	Designated Account
DALY	Disability-adjusted life year
DPF	Development Policy Financing
DRG	Diagnosis-Related Group
ECA	Europe and Central Asia
ESF	Environmental and Social Framework
ESS	Environmental and Social Standards
EU	European Union
EUR	Euro
FM	Financial Management
FMM	Financial Management Manual
FMoH	Federal Ministry of Health of the Federation of Bosnia and Herzegovina
GDP	Gross Domestic Product
GRM	Grievance redress mechanism
GRS	Grievance Redress Service
HIF	Health insurance fund(s)
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IFR	Interim Financial Report
IMF	International Monetary Fund
IPF	Investment Project Financing
IZIS	Integrated Health Information System in Republika Srpska
MDTF	Multi-Donor Trust Fund
MoF	Ministry of Finance
MoH	Ministry of Health
MoHSW	Ministry of Health and Social Welfare
NCDs	Noncommunicable diseases
OECD	Organisation for Economic Co-operation and Development
PAFPID	Planning, Analysis, Financing and Project Implementation Department
PBC	Performance-Based Condition
PDO	Project Development Objective
PHI	Public Health Institute
PIU	Project Implementation Unit
POM	Project Operations Manual
PPSD	Project Procurement Strategy for Development
SOE	Statement of Expenditures

STEP	Systematic Tracking of Exchanges in Procurement
TA	Technical Assistance
TF	Trust Fund
UNICEF	United Nations Children's Fund
USD	United States dollar
WB	World Bank
WHO	World Health Organization

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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Bosnia and Herzegovina	Health Systems Improvement Project	
Project ID	**Financing Instrument**	**Environmental and Social Risk Classification**
P171150	Investment Project Financing	Low

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[ ] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[ ] Fragile State(s)
[✓] Performance-Based Conditions (PBCs)	[ ] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	[ ] Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
07-Apr-2022	31-Dec-2027

Bank/IFC Collaboration

No

Proposed Development Objective(s)

The Project Development Objective is to contribute to improvement in the quality of care and in the financial sustainability of the health care systems in Republika Srpska and the Federation of Bosnia and Herzegovina.

Components

Component Name	Cost (US$, millions)
Increasing health system performance in Republika Srpska	53.42
Increasing health systems performance in the Federation of Bosnia and Herzegovina	21.40
Front-End Fee (financed from loan)	0.18

Organizations

Borrower:	Bosnia and Herzegovina
Implementing Agency:	Ministry of Health and Social Welfare, Republika Srpska Federal Ministry of Health, Federation of Bosnia and Herzegovina Ministry of Finance, Republika Srpska Federal Ministry of Finance, Federation of Bosnia and Herzegovina

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	75.00
Total Financing	75.00
of which IBRD/IDA	75.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	75.00

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2022	2023	2024	2025	2026	2027	2028
Annual	0.00	18.14	17.42	15.92	11.53	8.53	3.46
Cumulative	0.00	18.14	35.56	51.48	63.01	71.54	75.00

INSTITUTIONAL DATA

Practice Area (Lead)

Health, Nutrition & Population

Contributing Practice Areas

Governance, Macroeconomics, Trade and Investment

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Substantial
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Substantial
7. Environment and Social	Low
8. Stakeholders	Moderate
9. Other	Moderate
10. Overall	Substantial

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Not Currently Relevant
Community Health and Safety	Not Currently Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not Currently Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Not Currently Relevant
Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Sections and Description

Federation of Bosnia and Herzegovina Project Operations Manual. No later than two months after the Effective Date, the Federation of Bosnia and Herzegovina shall adopt, and thereafter carry out their respective part of the project in accordance with, a Project Operations Manual satisfactory to the Bank.

Sections and Description

PBC verification. No later than one month after adoption of the Project Operations Manual, Republika Srpska shall

enter into an arrangement with appropriate independent public verification institution(s), under terms of reference, qualifications and experience acceptable to the Bank and as set forth in the Project Operations Manual, including their obligation to provide reports on the level of achievement of PBCs, covering the time periods and content, and provided in the frequency set forth in the Project Operations Manual.

Sections and Description
Republika Srpska Project Operations Manual. No later than two months after the Effective Date, Republika Srpska shall adopt, and thereafter carry out their respective part of the project in accordance with, a Project Operations Manual satisfactory to the Bank.

Sections and Description
Republika Srpska grievance redress mechanism (GRM). No later than six months after the Effective Date, Republika Srpska shall establish and thereafter maintain throughout the implementation of the project, a grievance redress mechanism for the project, with established staff and performance standards.

Sections and Description
Federation of Bosnia and Herzegovina grievance redress mechanism (GRM). No later than six months after the Effective Date, the Federation of Bosnia and Herzegovina shall establish and thereafter maintain throughout the implementation of the project, a grievance redress mechanism for the project, with established staff and performance standards.

Conditions

Type	Financing source	Description
Disbursement	IBRD/IDA	The Subsidiary Agreement between the Borrower and the Project Implementing Entity referred to in Section 9.01 of the General Conditions has been executed by its parties.
Type	Financing source	Description
Disbursement	IBRD/IDA	The Project Agreement for the Project Implementing Entity referred to in Section 9.01 of the General Conditions has been executed by its parties.
Type	Financing source	Description
Effectiveness	IBRD/IDA	The Subsidiary Agreement between the Borrower and the Project Implementing Entity referred to in Section 9.01 of the General Conditions has been executed by its parties.
Type	Financing source	Description
Effectiveness	IBRD/IDA	The Project Agreement for the Project Implementing Entity referred to in Section 9.01 of the General Conditions has been executed by its parties.

I. STRATEGIC CONTEXT

A. Country Context

1. **Bosnia and Herzegovina (BiH) has been at peace for the past 25 years and, despite a complex political setup, has been able to achieve significant progress in its development**. Much of the infrastructure destroyed in the war (1992-1995) has been rebuilt, and institutions have been established to govern the country at all levels of authority. Bosnia and Herzegovina consists of two entities: the Federation of Bosnia and Herzegovina and the Republika Srpska (hereinafter "the entities"), as stated in the Constitution of BiH. The Federation has 10 autonomous cantons and 79 municipalities and cities; Republika Srpska has 64 local communities. The constitutional architecture also includes the Brčko District. Multiple reform efforts have improved economic links between the Federation of Bosnia and Herzegovina and Republika Srpska, and some progress has been made in creating a better environment for private sector development and job creation. Still, much more needs to be done if BiH is to achieve sustainable prosperity for its citizens and fulfill its aspiration to join the European Union (EU).

2. **The public sector is expensive, inefficient, and suffers from limited skills and lack of accountability**.[1] Fragmented institutions and governance have weakened systems of accountability, human resource management, and public financial management in the public sector, and slowed investment in efficiency-enhancing digital technologies. This has led to runaway spending, significant waste, and hollowed out the public sector's skill base and capacity to deliver necessary services. BiH's public sector comprises over 30 percent of all workers and in 2019 the public wage bill amounted to 10.8 percent of gross domestic product (GDP).[2] Yet the public sector is also extremely inefficient and the expected return on the governments' large investments is low. Despite BiH's high expenditure on public services relative to most EU and other countries in Europe and Central Asia (ECA), the quality of public services compares very unfavorably to comparators. Most countries in ECA achieve higher satisfaction levels with lower spending.

3. **Weak public sector institutions and financial management have contributed to the accumulation of significant budget overruns and arrears,[3] which threaten fiscal sustainability and elevate fiscal risks.** Although overall public debt has decreased (from 43.6 percent of GDP in 2015 to 31.0 percent in 2019), significant fiscal risks arise from unmeasured off-budget liabilities and arrears and large liabilities of health care facilities and state-owned enterprises. The arrears in Republika Srpska are mainly in the healthcare sector, whereas arrears in the Federation of Bosnia and Herzegovina, mostly in cantons, are mainly in unpaid pension and healthcare contributions in state-owned enterprises. In some social sectors, arrears threaten the sustainability and quality of service delivery. Delays in payments to suppliers and employees halt equipment deliveries and daily work of service providers, while repayments of past arrears squeeze needed new investments. Other effects of arrears accumulation include reduced government revenues from under-collection of tax and social security contributions, higher prices as suppliers factor in the cost of arrears, and barriers to restructuring and privatization of affected state-owned enterprises. Without strong corrective action, arrears threaten the viability of large segments of BiH's public sector.

[1] Unless otherwise noted, data and analyses are from World Bank (2020). *BiH Systematic Country Diagnostic Update*.
[2] BiH 2021-2023 Global Framework of Fiscal Balance and Policies
[3] "Arrears" refers to overdue unpaid liabilities, owed to suppliers and other contractors.

4. **BiH's economy is now confronted by the possibility of a deep recession as the coronavirus disease (COVID-19) pandemic constrains economic activity.** In 2019, real GDP growth slowed from 3.6 percent in 2018 to an estimated 2.8 percent because of a less supportive external environment and political uncertainty. Slower growth in the Euro zone, the largest BiH export market, and regional trade disputes contributed to a decline in exports, as did a slump in industrial production, resulting in part from temporary output disruptions at large exporting firms. Consumption growth contributed 2.6 percent to economic growth in 2019, investment added 0.4 percent, but net exports subtracted 0.2 percent. More recent data for the first half of 2020 indicate a sharp slowdown of economic activity as a result of the current pandemic; the outlook is subject to significant uncertainty. The World Bank (WB) estimates that BiH's economy will contract by 3.2 percent in 2020, subject to further revisions due to the unprecedented and rapidly evolving situation.

5. **COVID-19 poses the most serious social and economic challenge to BiH since the 2008-09 global financial crisis**. The COVID-19 outbreak is straining health systems, while measures to contain its spread are resulting in an economic slowdown and threaten the economic security of many of its citizens, particularly those with low incomes. COVID-19 also risks accelerating BiH's pace of outward migration, already the highest in the region. A third of those who renounced BiH nationality in 2018 were between 18 and 35 years old, with peaks for both the low and highly educated, indicating a high rate of loss of BiH's current and future human capital. While the toll the pandemic ultimately takes on the country will not be clear for some time, a strong, coordinated institutional response is critical to both containing the spread of COVID-19 and working to limit its social and economic effects.

6. **An emergency COVID-19 loan was recently approved to help BiH prevent, detect and respond to COVID–19.**[4] The EUR 33.1 million (USD 36.2 million equivalent) loan finances a range of interventions to strengthen public health services and to safeguard lives and livelihoods overall. It offers financial and technical assistance (TA) to increase isolation capacities in hospitals, obtain new intensive care beds equipped with ventilators, establish new designated laboratories, and procure other medical equipment and materials. Furthermore, some 48,000 people most affected by the pandemic crisis are receiving social assistance. The country did well to control the pandemic in the first half of 2020, promptly imposing restrictions on entry into and movement within the country. Loosening of the lock-down and increased travel over the summer of 2020, however, produced a second surge of the infection, with record breaking numbers of new cases now occurring.

7. **A Development Policy Financing (DPF) operation focused on the health sector is also under preparation, expected to be submitted to the WB Board later in 2022**. The financial assistance provided through the DPF is intended to support the immediate clearance of health systems' stock of arrears. The DPF's prior actions and policy triggers are designed to create a supportive legislative and regulatory environment for this Investment Project Financing (IPF) operation, comprising the adoption of laws and related policies on financial consolidation of health systems in each entity, alongside complementary laws on health care, health insurance, the health chambers, and health care documentation and records. The linkages of this project with the planned health sector DPF are described in more detail in Section IV. A. Technical Analysis.

8. **The complex political structure and weak mechanisms of BiH for inter-government cooperation pose a challenge to effective policy reform and implementation.** The state-level and entity parliaments meet sporadically. Delays in forming the BiH Council of Ministers following the 2018 elections, as well as in the

[4]Bosnia and Herzegovina Emergency COVID-19 Project (P173809): approved April 23, 2020; effective September 1, 2020.

Federation, uncertainty over the formation of a new government (alongside challenges around agreeing on electoral legislation for the Federation's House of Peoples) presented barriers to the smooth implementation of reforms. Collaboration between cantonal, entity-, and state-level institutions remains problematic. The persisting absence of an agreed coalition government in the Federation following the 2018 elections further complicates the picture. Nevertheless, agreement on the Council of Ministers at the BiH level in early 2020 has led to renewed commitment to health sector reform. Furthermore, despite the BiH's complex constitutional arrangements, a clearly defined reform agenda exists, underpinned by a broad national consensus on critical challenges and priorities and adopted by the Council of Ministers of BiH, Government of Republika Srpska, and Government of the Federation of Bosnia and Herzegovina. This document, the *2019-2022 Socio-Economic Reform Program,* also benefits from the sustained support of key development partners.

9. **The *2019-2022 Socio-Economic Reform Program* represents a rare window of opportunity for structural reforms in BiH and provides the basis for WB assistance.** The Program lists four priorities, one being "*comprehensive reform and improved quality of the health care system*". The document lists nine commitments jointly made by the entities, including "*urgent steps to halt the growth of health sector arrears and achieve financial stability*" and "*provide for well-managed and good quality accessible public health care for all citizens*". It also describes specific challenges facing the health sector, including the need to improve its fiscal sustainability and identify additional funding sources, to improve service delivery as well as health sector governance and accountability. The WB is identified as BiH's main development partner in this area. In addition, the *Republika Srpska Economic Reform Program* also highlights the lack of financial sustainability of the health sector and envisages specific reforms to increase sector performance and governance, with WB support. Further pressure for health sector reform comes from the conditionalities placed around macro-financial assistance from the EU following the COVID-19 pandemic. These include required actions to strengthen the health sector and take advantage of a better coordinated procurement process of pharmaceuticals and medical equipment, especially for high-cost and high-volume medications. Together, these documents provide a strong mandate for reform.

B. Sectoral and Institutional Context

10. **By basic measures, health outcomes in BiH are in line with Western Balkan countries but lag substantially behind EU states.**[5] In 2018, average life expectancy at birth (77 years) was on par or better than other EU accession states in the region but lower than Croatia's (78) and Slovenia's (81). Similar trends hold for age-standardized death rates (0-64 years of age) for malignant neoplasms, diseases of the circulatory system, ischemic heart disease, and cerebrovascular disease. BiH's infant mortality rate (5.1 per 1,000 live births) is the highest in Western Balkans and above the EU average (3.3 per 1,000 live births).

11. **The main public health challenge in BiH is the high burden of non-communicable diseases (NCDs), namely heart disease, stroke, cancer, diabetes, and chronic respiratory disease.** NCDs are estimated to account for 80 percent of the country's annual deaths and dominate the overall burden of disease and disability, as do the risk factors that contribute to them, such as high blood pressure, tobacco use and unhealthy nutrition.[6] Total cancer incidence per 100,000 population has been growing (increase of 69 percent in Federation of

[5] World Development Indicators, 2019.
[6] World Health Organization Regional Office for Europe. Tackling noncommunicable diseases in BiH. Copenhagen, 2018

Bosnia and Herzegovina and 25 percent in Republika Srpska, during 2013-2017), and cancer mortality has been on the increase as well.[7]

12. **Resources to meet BiH's health care needs are modest**. In 2017, BiH spent almost 9 percent of GDP on health,[8] a high figure for a middle-income country. The equivalent per capita figure, however, is low at just USD 460 per person per year. The number of hospital beds and health care workers, summarized in Table 1, is also modest compared to other Western Balkan countries. To meet the population's health care needs, BiH's limited health care resources must be used as efficiently as possible. There is extensive evidence, however, that this is not the case.

Table 1: Overview of Health Systems in BiH

	The Federation of Bosnia and Herzegovina	Republika Srpska
Ministry of Health (MoH)	1 federal 10 cantonal	1 Ministry of Health and Social Welfare
Health Insurance Funds (HIF)	1 Federation fund[9] 10 cantonal funds	1 HIF
Public Health Institutes (PHI)	1 federal PH institute 10 cantonal PH institutes	1 PHI
Quality and Accreditation Agency	1 agency	1 agency
Hospitals	18	10
Special hospitals	3 [10]	3 [11]
Special institutes		6 [12]
Acute beds per 100,000 population	3.3	2.4
Primary care facilities	79	55
Physicians per 1,000 population	2.24	2.25
Nurses, midwives, and technicians per 1,000 population	5.61	4.12

Health systems challenges

13. **Reflecting BiH's complex political constitution, health care insurance and health care services are uneven.** Although responsibilities for health sector functions are relatively clearly defined in the law, they are divided between a large number of jurisdictions and institutional actors.[13] In both entities, service provision is the responsibility of primary care centers, hospitals (secondary care), and clinics (tertiary care). Ownership, policy, oversight, financing, certification, and supervision mandates are divided across several levels of government. In both entities, primary care centers are established and owned by municipalities (in the

[7] Health Statistics Annual, FBiH and Statistical Yearbook, RS Institute of Statistics.
[8] National Health Accounts, from the Agency for Statistics of Bosnia and Herzegovina, www.bhas.gov.ba
[9] *Zavod Zdravstvenog Osiguranja i Reosiguranja Federacije Bosne i Hercegovine,* Health Insurance and Reinsurance of the Federation of Bosnia and Herzegovina, www.zzofbih.ba
[10] Jagomir Psychiatric Hospital, Sarajevo; Tuzla Heart Center; the Hospital for Pulmonary Diseases and Tuberculosis, Travnik.
[11] Sokolac Psychiatric Hospital; Modrica Hospital for Chronic Psychiatry; Kozarska Dubica Special Hospital for Orthopedic Medicine and Rehabilitation.
[12] Occupational and Sports Medicine; Stomatology; Forensic Medicine; Transfusion Medicine; Orthopedic Medicine and Rehabilitation; and Forensic Psychiatry.
[13] Discussion excludes Brcko District since it is not covered by the present project.

Federation of Bosnia and Herzegovina, a handful are, instead, owned by cantons). Ownership of hospitals and clinics in Republika Srpska is centralized in the entity's Ministry of Health and Social Welfare, while in the Federation of Bosnia and Herzegovina, it is decentralized to cantonal MoHs. In some cases, such as with three university clinical centers, ownership is shared between cantons and the Federation.

Box 1: The legal framework underpinning health systems governance in BiH

BiH's health sector is governed by a complex and fragmented legal framework. Responsibility for many functions is constitutionally devolved to entity and cantonal governments, resulting in 12 relatively autonomous health systems covering Republika Srpska and Federation of Bosnia and Herzegovina entities, each of the ten Federation cantons, and Brcko District. Ownership, financing, certification, accreditation, and supervision of public and private health care institutions are regulated by three separate Laws on Health Care, covering the two entities and Brcko District. Additional specialized laws at the entity level supplement the Laws on Health Care on some aspects, such as the Law on health chambers in the Republika Srpska and Law on system of quality improvement, safety and accreditation of health care institutions and Law on patients' rights in the Federation of Bosnia and Herzegovina.

In both entities, public health care institutions are governed by separate relevant entity- and cantonal-level laws and by-laws on financial management and human resource management in the public sector. Public procurement is regulated by a single BiH Procurement Law. Separate entity-level Laws on Health Insurance govern the functioning and financing of health insurance systems and exercise of health insurance rights. Entities have their own Laws on Pharmacies, although a single BiH Law on Pharmaceuticals and Medical Devices governs BiH's single pharmaceutical market.

14. **Inadequate quality of care and dissatisfaction with BiH's health care systems are a concern.** The most recent multi-country comparison of population satisfaction with health care systems[14] found that only 48 percent of the population in BiH were satisfied with the healthcare system, the lowest in the Western Balkans. These sentiments are backed up by objective data on quality and outcomes of care. In Republika Srpska, for example, fatality rates after a heart attack are 10 percent or higher in a number of hospitals, substantially worse than the Organisation of Economic Co-operation and Development (OECD) average of around 6.9 percent.[15] Agencies for quality monitoring and improvement are also well-established in both entities. These agencies have also developed systems for benchmarking of family medicine teams based on key health outcomes, such as management of hypertension. This information, however, is not yet made public or used for payment.

15. **Another critical weakness across BiH's health systems concerns overdue unpaid liabilities ("arrears") to creditors**. Arrears pose an immediate threat to the sustainability of the health care sector. In Republika Srpska, before the emergence of the COVID-19 pandemic, the health sector had accumulated approximately EUR 505 million in total liabilities[16] to suppliers, salaries, the HIF, and the tax authorities over the past twelve

[14] European Bank for Reconstruction and Development's *Life in Transition Survey*, available from *https://litsonline-ebrd.com*
[15] OECD health statistics, available from *https://data.oecd.org/health.htm*
[16] Data received from Ministry of Health and Social Welfare; data on liabilities does not reliably distinguish between unpaid liabilities and overdue unpaid liabilities ("arrears"). Nevertheless, the term "arrears" is used throughout this document given its

years (around EUR 40 million/year on average). In February 2020, the Ministry of Finance indicated that, in dealing with arrears in the health sector, its intention is to first deal with the arrears to the tax authorities, for social security contributions, and to banks. At this time, the amount needed for clearance of the arrears was estimated to be EUR 340 million. In the Federation of Bosnia and Herzegovina, the proposed *Law on Restructuring and Financial Consolidation of Public Health Institutions* indicates that health sector liabilities at the end of 2016 had reached BAM 269 million (EUR 138 million), of which BAM 175 million (EUR 90 million) were overdue for payment by more than 90 days (that is, in arrears), with an accumulated operating loss across health care providers of BAM 167 million (EUR 85 million). The law states that health sector losses are likely to grow. Health care facilities in the Federation have made some progress since then in reducing arrears to the tax authorities. To start clearing health sector arrears, however, the ministries of finance in each entity need to be confident that arrears will not simply reaccumulate.

Box 2: Prior and on-going WB analytics informing project design

Health Care Arrears in Bosnia and Herzegovina (P161510; completed in May 2018) mapped the extent and immediate causes of arrears in BiH's health systems. It found that, in both entities, arrears were most often generated by hospitals (as opposed to primary care facilities or health insurance funds) and were largely owed to other public agencies (tax and social security authorities) and suppliers. It concluded that the financial imbalances leading to these arrears were predominantly due to poor expenditure controls (rather than insufficient revenue), which were, in turn due to high input prices (particularly for drugs and medical devices), a growing wage bill (including unusually high numbers of non-clinical employees) and a surplus of activity in hospitals that could be delivered more cost-effectively in primary care.

The Bosnia and Herzegovina Functional Review of Health Systems (P161510; completed in November 2020) assessed performance of BiH's health systems more broadly and explored deeper causes of good or bad performance at facility- and system-level, both clinical and financial. It found that the legislative and policy frameworks governing BiH's health systems were out of date, preventing more efficient use of the health care network and health care workforce. It also assessed controls, incentives and performance frameworks for clinical and financial performance as weak and noted that accountability to citizens for health systems performance was under-developed.

Ongoing WB analytical work on BiH's health systems (Functional Review of the Health System Performance, P167607) will support project implementation and continuous refinement of project activities. It includes:

- a formal mapping of health systems stakeholders, analyzing their influence over and incentives for/against key reforms, using the *Net-Map* tool;
- a survey of health care facilities' lead clinicians and managers, analyzing their performance incentives and performance monitoring frameworks, using the *World Management Survey* adapted to the BiH context*;*
- a quantitative study of workforce numbers, distribution and productivity, with options for optimization, using techniques applied by WB in other health systems;

widespread use, and for ease and consistency.

- a study of bottlenecks preventing more effective management of non-communicable diseases at the primary health care level, in partnership with the *Primary Health Care Performance Initiative* (https://improvingphc.org/); and,
- a study of the current and potential role of private health care providers in the management of non-communicable diseases, in partnership with *Access Accelerated* Trust Fund (*https://accessaccelerated.org/*).

Technical assistance will also be offered to guide possible reforms on expanding health systems' revenue base, including new or increased taxes on environmental pollution, tobacco products, sugary drinks); delinking health care insurance from employment status; switching to general tax revenue for the health insurance fund; and revising categories of persons exempt from contributing to health care insurance and/or degree of exemption.

Key constraints underlying unsatisfactory health care quality and poor financial sustainability

16. **The root causes driving disappointing quality of care and poor financial sustainability are fundamentally intertwined.** Health care providers and policy makers in BiH, rightly, do not view quality and sustainability as separate objectives that should be pursued independently. Instead, these goals are understood to be two equally important, and mutually reinforcing, dimensions of system performance. The explanatory factors underlying unsatisfactory quality of care and weak financial sustainability are also, to a large extent, the same. The analytics (Box 2) point to five key constraints that need to be addressed in both entities, as outlined below.
    (a) **Weaknesses in preventive and primary care.** There is room to strengthen preventive and primary care, thereby reducing unnecessary use of hospitals.
    (b) **Inefficiencies in hospital care.** (Unavoidable) in-patient hospital care is not provided in ways that optimize value for money.
    (c) **Lack of effective financial controls.** Irrespective of efficiency, there is a lack of effective financial controls to prevent over-spending in hospitals.
    (d) **Weaknesses in incentives and accountability.** Performance frameworks that would enable managers and clinicians to improve quality of care and financial balance are not well developed.
    (e) **Under-funded health care systems**. BiH's health care systems are, most likely, under-funded for the level of service that they aim to provide.

17. **Service design and delivery is compromised by inefficiencies in the allocation of health care activity across the network of preventive, primary and secondary care services - constraint (a).** Institutional fragmentation jeopardizes the quality of care in both entities by undermining network coordination. Primary care workload (as measured by consultation rate) increased in both entities between 2013 and 2018, but it remains unclear to what extent general practitioners and family medicine specialists truly act as gatekeepers for hospitals and resolve primary health care needs appropriately. Too much complex, chronic care is still managed, at high cost, in hospital settings, rather than proactively, at lower cost, in primary health care settings. In the Federation of Bosnia and Herzegovina, around 27 percent of all doctor consultations result in referrals (compared to 16 percent in Croatia in 2014); no data on referrals is available for Republika Srpska. As a result, in-patient care in hospital settings still consumes almost half of total expenditures, compared to

an OECD average of 30 percent, indicating scope to allocate funds to more cost-effective primary care settings. In Republika Srpska, there are high and increasing levels of admissions for conditions that could be treated outside of hospitals (including diabetes, hypertension, pneumonia, chronic obstructive pulmonary disease, and asthma); no information on disease-specific admission rate is available for the Federation. Hospitals in East Sarajevo, Trebinje, and Foca particularly stand out in this respect, indicating the need to strengthen primary care and/or revisit clinical guidelines in these areas.

18. **The lack of network coordination is both a result of and impacted by poor planning and data management.** Providers across, and even within, political jurisdictions do not undertake joint strategic planning activities to assess and plan for projected demand and to develop clinical pathways for integrated care. The lack of a unified patient database and records system prevents effective referrals across all levels of facilities and across municipal-cantonal-entity jurisdictions, to share the patient burden more evenly. Both entities have made progress in establishing electronic patient records, but implementation is uneven, and data is not freely shared across facilities.

19. **Service design and delivery is also compromised by inefficiencies within hospitals and the lack of payment systems to incentivize high quality care - constraint (b).** Productivity challenges at the hospital level are caused by both managerial as well as structural inefficiencies**.** There are a number of structural and systemic inefficiencies. The number of beds in BiH's health systems is broadly in line with international comparators. Nevertheless, key indicators, such as the number of beds per doctor and bed occupancy rates, vary widely among comparable hospitals indicating scope for rationalization in some facilities. In Republika Srpska, the number of beds per doctor varies from 2 in Nevesinje to 3.7 in Bijeljina. Bed occupancy rates are also low compared to western European standards, varying from 51 percent in Zvornik to 82 percent in Clinical Center Banja Luka. Similar variation exists across hospitals in the Federation of Bosnia and Herzegovina, where average bed occupancy is less than 60 percent, signaling substantial capacity for more efficient use of the hospital estate. Measures of hospital productivity, such as the number of discharges per staff member, vary two-fold (from 7.9 discharges per clinician in Canton 10 to 18.1 discharges per clinician in Srednjo-bosanski canton). In both entities, payment structures do not adequately incentivize quality of services. There are no stimuli for following clinical pathways, guidelines or for the provision of preventative care. Similarly, the contracting system does not optimize efficiency: in the Federation of Bosnia and Herzegovina, the diagnosis-related group (DRG) payment system is barely used, and in Republika Srpska the system does not currently benefit from an established process for systematic tariff revision, so reimbursement is not well calibrated with actual costs and incentives for high-quality care. In addition, in both entities there is scope to concentrate complex or high-cost services into fewer specialist centers. The current allocation of activities, where almost all hospitals provide almost all services, compromises quality and raises costs.

20. **The lack of effective controls to prevent hospitals from over-spending further exacerbates the accumulation of arrears - constraint (c)**. Inefficiencies also emerge out of skewed incentive regimes**.** In both entities, health facility managers who accumulate operating deficits and arrears are not penalized, and managers who take steps to improve efficiency and reduce arrears are not rewarded. There are gaps in the legal framework – notably the Health Insurance Law places most responsibility for arrears on the HIF – but other accountability measures are not being enforced. For example, many hospitals are not submitting annual performance reports, despite a requirement to do so, many facilities are not paying employers' share of social

security contributions, and there are no consequences for, or follow up on, negative audit findings of health facilities. In addition, it has been reported that capital investment decisions – both infrastructure and investments in diagnostic equipment – are sometimes made without fully considering current cost implications or the challenges of the duplicated health service network.

21. **This lack of incentive and weaknesses in accountability also impacts quality and financial management - constraint (d).** In both entities, the institutional framework and capacities for monitoring health sector efficiency and quality are not adequately defined and supported. Although agencies for quality monitoring and improvement are well-established in both Republika Srpska and the Federation of Bosnia and Herzegovina, their impact on day-to-day clinical work or strategic thinking remains limited. Accreditation currently focusses on the achievement of minimum standards, rather than more ambitious goals of continuous quality improvement. Both agencies have also developed systems for benchmarking of primary care teams and hospitals on key health outcomes (such as management of hypertension). These indicators are not, however, publicly disclosed or used for payment. Additionally, health insurers' contract and payment arrangements with health care providers do not optimize incentives for quality or efficiency. Managerial inefficiencies at the hospital level are often caused by weaknesses in leadership, in turn due to the hospitals' autonomy regarding the recruitment and appointment of employees at all levels (board members, managers, and regular clinical and non-clinical staff), causing politicization and non-accountability amongst staff. Systems to appoint and train qualified managers also need to be strengthened to provide a supply of managers who can balance the financial and quality related needs of the sector. The combination of weak governance, political patronage and limited citizen engagement means that health systems are not held to account for providing good care. In addition, patients have little choice over where they can get care, so they cannot resolve dissatisfaction with a health care service by going elsewhere.

22. **Incentives for budget prudence are weak.** Incentives for providers to stay within their budgets are low due to weak reporting, oversight, and expenditure controls, as well as structural misalignments in accountability for expenditures. Weak expenditure reporting dilutes accountability and incentives for budget prudence. In both entities primary care centers are not integrated into the treasury system, which reduces the transparency and oversight over their expenditures. Lack of effective oversight and expenditure controls permit providers to overspend their budget allocations and run into arrears. Legally, HIFs and MoFs have weak capacity to monitor and control expenditures. For example, gaps in legal frameworks permit facility managers to recruit additional staff (beyond filling vacancies) without the approval and control by MoFs or other relevant control bodies, even if there is no funding available, which generates arrears in salary and other payments. Misalignment in budget accountabilities, partly rooted in incomplete legislation, contributes to overspending and arrears. The health insurance laws in each entity place most responsibility for arrears on the HIFs: HIFs are by law obligated to pay hospitals and clinics for services that are uncapped and deemed necessary. Decisions over spending and classification of services by payment categories, however, rest with the facilities. This setup disproportionally distributes the risk of budget overruns to the HIF and does not incentivize managers to stay within their annual allocations. The ongoing integration of primary care centers into the treasury system in Republika Srpska is expected to strengthen the founders' accountability for financial performance.

23. **Effective service delivery, financial management (FM), and systems governance are constrained by the wider macroeconomic environment - constraint (e).** BiH's limited health care resources must be used as

efficiently as possible. Some recent reforms, however, have weakened the health systems' financial position: in Republika Srpska, for example, the rate of mandatory employee contributions to the health insurance fund was reduced in 2013, from 12.5 to 12 percent for the employed (compared to 15 percent in 2001) and from 2 to 1 percent for the retired (compared with 3.75 percent in 2009). As a result, the HIF estimates a total revenue loss of BAM 81 million between 2013 and 2016. Crucially, these decisions to reduce the funding envelope were not aligned with expenditure decisions. Central decisions to increase wages, the lack of planning around capital investments, and the lack of an evidence-based approach to the benefits package have further contributed to arrears. For example, in Republika Srpska, centrally mandated salary increases for staff, particularly in 2008 (86 percent), created an additional annual burden of BAM 80 million for facilities, but without an increase in financial allocations. The HIF took out loans to cover the gap, but the 67 health facilities were responsible for repayments. In the Federation of Bosnia and Herzegovina, the proposed *Law on Restructuring and Financial Consolidation of Public Health Institutions* notes that fiscal policy has not kept up with trends in health care needs and services. Commitments to increase excise duties on tobacco and alcohol, with the resulting revenue being directed to the health sector, and to increase government subsidies for older peoples' use of health care services remain unfulfilled, meaning that the sector is at risk of being under-funded relative to need.

Governments' response

24. **The governments in each entity have adopted, or are in the process of adopting, plans and legislative frameworks to improve health systems performance, and have requested WB financial and TA to support implementation.** In Republika Srpska, two health sector Action Plans have been formally adopted: one addresses health sector financial sustainability (prioritizing, amongst other things, transfer of health care providers to Republika Srpska's and community governments' "treasury system", the budget planning, execution, and monitoring system supervised by competent local authorities and by the Ministry of Finance); the other aims to improve the quality of care for NCDs (prioritizing, amongst other things, expansion of preventive care and strengthening of primary care). In addition, the legislative framework underpinning the health care system is being revised through the preparation of four new laws on: (a) health care (addressing strengthened primary care, the creation of service networks, a more prominent role for clinical guidelines, a strengthened role and more secure funding for the Agency for Certification, Accreditation and Health Care Quality Improvement (ASKVA), and expansion of telemedicine amongst other things); (b) health insurance (addressing categories of insured persons, the range of health care benefits, and revision of contract and payment arrangements with health care providers to incentivize quality and efficiency amongst other things); (c) health chambers (addressing professional roles and spheres of activity, training and continuous professional education amongst other things); and (d) health documentation and records in the field of health care (addressing documentation used in health care institutions in the provision of health services, reporting, the introduction and use of the integrated health information system (IZIS), and electronic communication and electronic documentation).

25. **In the Federation of Bosnia and Herzegovina, laws that transfer the largest teaching hospitals to the Federation's treasury system (and that allow smaller hospitals to be transferred to cantonal treasury systems) are being prepared**, as well as creation of a new financial regulator for the health sector. Complementary laws that aim to increase the revenue available for the health sector through expansion of social security contributions are also being drafted. It is widely recognized, however, that implementation of these reforms will be difficult (Republika Srpska has been trying to transfer health care providers to the

treasury system for several years). Accordingly, both entities have requested assistance from the WB to support implementation of the necessary reforms. This will include both financial assistance (to clear current arrears and allow transfer of health care providers to the treasury system, as well as invest in activities to improve health care quality and efficiency) and TA (to improve FM, as well as health care quality and efficiency).

26. **A comprehensive and coordinated package of assistance will be needed to support health systems reform in both entities.** Given the depth, complexity and persistence of the problems to be solved, a sophisticated sequence of technical and financial inputs is needed to tackle the twin problems of unsatisfactory health care quality and unsustainable health systems arrears, as described below:
    - ***Immediate*:** assistance to clear the stock of existing arrears;
    - ***Immediate to short- and medium-term*:** assistance to arrest the occurrence of new arrears, by improving the performance of health systems ('spending more effectively'; constraints (a), (b) and (d)) and by improving FM ('stopping overspending'; constraints (c) and (d)); and,
    - ***Longer term:*** assistance to ensure sustainable health systems financing in the long term; constraint (e).

27. **This project will support activities in the second step (assistance to arrest the occurrence of new arrears)**. As mentioned earlier, a health-focused DPF operation is also under preparation--this will help address the first step (assistance to clear the stock of arrears). In addition, to the citizen engagement activities within the project (which are described in Section II and include facility-level feedback on performance and patient satisfaction surveys), the TA needed for additional training, consultancies, communications, and outreach activities is planned under an accompanying health sector-focused trust fund (TF), as shown in Annex 5. The interaction between this project, the DPF, and TA supported through associated TFs is described in Section IV. A. Technical Analysis. Care has been taken to avoid gaps or overlapping of activities and financial resources across the projects/activities. A schematic overview of a roadmap for ensuring the long-term financial sustainability of BiH's health systems, including the intended instruments, is provided in Table 2.

Table 2: A Roadmap for Ensuring the Long-Term Financial Sustainability of BiH's Health Systems

Step on the roadmap	Instruments
1. Assistance to clear the stock of existing arrears	✓ planned DPF series (through budget support) ✓ other sources of budget support, such as support from the International Monetary Fund (IMF)

Step on the roadmap	Instruments
2. Assistance to arrest the occurrence of new arrears i. Spending more effectively (*addressing constraints (a) and (b), supported by action to address constraint (d)*) ii. Stopping over-spending (*addressing constraint (c), supported by action to address constraint (d)*)	✓ planned DPF series (through prior actions) ✓ this project (through investments and performance-based conditions) ✓ analytics, training, and communications provided through the linked TF
3. Assistance to ensure sustainable health systems financing in the long-term (*addressing constraint (e)*)	Future DPF, IPF, and TF focused on: ✓ deepening quality and efficiency reforms started in Step 2 ✓ addressing likely structural shortfall in health systems revenue.

Stakeholder engagement

28. **The WB has consulted a wide range of stakeholders, including health care providers, to identify appropriate objectives and activities for the project**. A stakeholder analysis was conducted in both the Federation of Bosnia and Herzegovina and Republika Srpska and based on this, Working Groups were established in both entities, comprising representatives from the ministries of health and of finance, the health insurance funds, health care providers and professional associations. In initial meetings, the Working Groups were asked to participate in the identification of priority investments for the project as well as specific, measurable, achievable, relevant, time-bound indicators to monitor progress/achievement of the Project Development Objective (PDO). The WB has also developed close and effective collaboration with development partners (including United Nations agencies and several national development agencies and/or embassies) through a standing committee that discusses health sector issues, thus, developing a single, coherent voice on priorities for reform.

29. **Maintaining and extending this level of stakeholder engagement during project implementation is a priority**. This will be achieved through the standing committee, and with involvement of politicians, as and when appropriate. Groups representing patients or care takers are virtually non-existent in BiH. New platforms are being developed, however, to facilitate engagement with citizens and health care users and to build a consensus for reform, as described in Box 3.

Box 3: Enhancing citizen engagement in BiH's health systems

The *Strengthening Transparency and Accountability of Health Systems in Bosnia and Herzegovina* trust fund (P175779), supported by the United Kingdom, will deliver a tailored package of technical assistance to improve health systems' transparency and accountability. Two sets of activities are being implemented to support mutually reinforcing objectives: a) establishing effective and resilient citizen engagement

mechanisms; and b) developing policy options for strengthened fiscal and procurement practices, thereby addressing both 'demand-side' and 'supply-side' accountability.

These activities lay essential groundwork for deeper and more structured engagement of citizens, civil society, and communities for greater transparency and accountability in the health care domain. The output of this work will include a Citizen Engagement Framework for the health sector and prototype digital platform (with related input for the project's Operations Manual), and pilot studies on the integrity of procurement, and on transparency and accountability in areas such as financial or workforce management, whose recommendations will be implemented through a longer-term multi-donor TF (MDTF). The project is also piloting an online platform to facilitate and integrate citizens' engagement with health systems, and a platform for giving feedback on health care services.

Accountability will be strengthened through increased public awareness, engagement, and support for health sector reforms on the demand side, and through increased transparency and responsiveness of health care providers and authorities on the supply side. The WB will leverage its network to transfer knowledge and start building capacities of local counterparts. Specific activities will enable building skills and competence civil society organizations to engage women and vulnerable groups on local aspects of health systems reform. These preparatory activities will be maintained and built upon through the duration of the project.

C. Relevance to Higher Level Objectives

30. **The 2016-2020 Country Partnership Framework (CPF)[17] identifies an efficient public sector and targeted health sector reform as high priorities.** The high priority of health sector reform is also identified in the 2020 Systematic Country Diagnostic update.[18] This is justified both in terms of ensuring the fiscal sustainability and quality of service delivery, as well as the importance of improving services for the benefit of citizens' health and productive capacity. The CPF envisions WB assistance that will modernize the health sector to promote greater efficiency and quality, ensure better flow and use of information within health systems, and strengthen systems for quality assurance. The CPF also anticipates that complementary health sector reforms will be supported through DPF, including measures to implement reforms that will reduce health sector arrears. Annex 6 describes how the WB's program of work in BiH has been adjusted in response to the effects of the COVID-19 pandemic.

31. **The project will also support the achievement of the WB twin goals of reducing poverty and boosting shared prosperity**. Access to better quality of health care services is fundamental for eradicating extreme poverty and promoting shared prosperity. Specifically, improved delivery of quality health services, prevention and treatment would reduce avoidable mortality and have a positive impact on the productivity of the labor force and, potentially, on BiH's economic growth. Furthermore, the proposed project would contribute to the goal of ending preventable deaths and disability through delivery of quality health prevention, detection, and treatment services to the population of BiH.

[17] Report No. 99616-BA; https://www.worldbank.org/en/country/bosniaandherzegovina/publication/bosniacpf. The CPF was extended, in line with other CPFs due to expire in 2020, due to the global COVID-19 pandemic. A new CPF is under preparation.
[18] https://openknowledge.worldbank.org/handle/10986/33870

II. PROJECT DESCRIPTION

A. Project Development Objective

32. **The PDO is to contribute to improvement in the quality of care and in the financial sustainability of the health care systems in Republika Srpska and the Federation of Bosnia and Herzegovina.**

33. **The project aims to improve both the quality of health care services, as well as the financial position of BiH's health systems, with more effective governance as an underlying and unifying theme**. Investments and incentives in each of these areas can, together, help ensure that arrears cleared today do not reaccumulate tomorrow. Regarding financial sustainability, the project will help BiH's health systems *stop overspending* as well as *spend more effectively*. This is a necessary first phase in a longer-term program of work that BiH must undertake. Most likely, this will also need to include eventual expansion of the revenue base for the health sector.

34. **PDO indicators.** Progress towards the achievement of the PDO will be monitored through the following indicators:

1) The percentage of health care providers demonstrating quality gains through a defined set of indicators[19] that are publicly disclosed;
2) The percentage reduction in the rate of hospital admissions where the only recorded diagnosis is arterial hypertension, or where the principal diagnosis is uncomplicated arterial hypertension;[20] and
3) The percentage of health care providers achieving a debt ratio of 0.5 or less at the end of the financial year.[21]

35. **The proposed indicators directly relate to the PDO,** addressing the quality of clinical care (indicators 1 and 2) as experienced directly by the key beneficiaries of the project, that is, patients and their care takers, as well as financial sustainability (indicator 3). Indicator 2, as a measure of efficiency, captures both quality and financial sustainability. The proposed indicators also directly relate to the constraints underlying unsatisfactory quality and sustainability, with indicator 1 addressing constraints (a), (b) and (d); indicator 2 addressing constraints (a) and (d); and indicator 3 addressing constraints (b), (c) and (d). The PDO indicators will be monitored separately for each entity; in addition, indicator 2 will be disaggregated by gender.

36. **Intermediate indicators**. Intermediate milestones towards achievement of the PDO will be monitored through indicators that track critical steps in strengthening the governance of BiH's health systems, alongside

[19] Indicators will be drawn from those already defined, collected, and analyzed by the health care quality agencies in each entity. The set will be defined through a consultative process involving MoHs, HIFs and health care providers.

[20] Arterial hypertension is chosen because it is, in a high-performing health system, almost always treatable in primary care and almost never a valid reason for hospital admission. In addition, data from Republika Srpska show year-on-year increases in hospital admissions for hypertension (equivalent data for the Federation of Bosnia and Herzegovina are not available).

[21] Debt ratio = total debt / total assets. This ratio captures both long term financial stability (by including assets), as well as progress in reducing arrears (a subset of liabilities), and therefore reflects well what is meant by 'financial sustainability' in this project and its PDO. The ratio can be easily calculated from routinely collected administrative data in each health care provider / health insurance fund and is well-established internationally as a measure of financial health (with 0.4 to 0.6 being typically acceptable figures).

key project activities or outputs that, together, can contribute to improved quality of health care and financial sustainability. Intermediate indicators, monitored separately for each entity and, where relevant, disaggregated by gender, will comprise:

Quality of health care:

- Percentage of health care providers that have established and disclosed an annual, representative, patient satisfaction survey consistent with international benchmarks;
- Percentage of health care service users engaged in providing facility-level feedback on performance who report that their engagement was effective in planning and delivering service improvements;
- Number of clinicians and health care managers trained in health care quality monitoring and improvement techniques;
- Number of studies conducted to allow concentration of specialist health care into fewer providers;
- Percentage of hospitals publishing waiting times for selected secondary health care services; and,
- The gap between the percentage of hypertensive men and the percentage of hypertensive women whose hypertension is adequately controlled, as defined by current clinical guidelines.

Financial sustainability:

- Number of health care providers or health insurance funds submitting financial reports, including overdue unpaid liabilities, to the appropriate authorities on time;
- Number of studies of patient pathways conducted to determine true cost and adjust reimbursement tariff; and
- Transfers from the general government budget to the health insurance fund for the purposes of paying health care insurance for special categories of the population, as defined in Article 10(a) of the Law on Health Insurance published in Official Gazette No. 18/99.[22]

B. Project Components

37. **The project has two components:**
(1) Increasing health system performance in Republika Srpska; and
(2) Increasing health systems performance in the Federation of Bosnia and Herzegovina.

38. **There will be one technical component per entity to facilitate implementation, each adjusted to reflect the needs and priorities of that entity's health system(s).** These technical components will finance investments to improve the efficiency and quality of health care (addressing constraints (a) and (b)); and the management capacity and financial sustainability of health care providers (addressing constraints (c) and (d)). Collaboration across entities in project implementation and monitoring will be encouraged, wherever feasible.

39. **In addition, in Republika Srpska performance-based conditions (PBC) will be used to incentivize reforms that can prevent further accumulation of arrears**. The PBCs will strengthen sector governance through institutional and policy changes that address the constraints underlying unsatisfactory quality and financial

[22] To be measured in Republika Srpska only, as the project expenditures are linked to Performance-Based Conditions (described later, under Sub-component 1.3).

sustainability set out earlier, thereby creating the foundations for longer-term and more challenging reforms. The federal MoH of the Federation of Bosnia and Herzegovina (FMoH) opted not to include PBC as part of their investment component. Instead, support to the Federation of Bosnia and Herzegovina for similar institutional and policy changes will be achieved through targeted technical assistance and TF-supported activities, as set out in Annex 5.

Component 1: Increasing health system performance in Republika Srpska (USD 53.42 million)

Sub-component 1.1. Improving the efficiency and quality of health care (USD 10 million)

40. **This sub-component will address constraints (a) and (b) by investing in goods, equipment and minor works to optimize the service network,** including strengthening preventive health care and health system preparedness; increasing primary health care and day-care, where appropriate; studying patient pathways to determine the true cost of health care for four patient groups[23] and, based on this, adjust the prices of selected services within the DRG system; and enhancing citizen engagement to gather users' feedback on health care and health insurance. Specifically, this sub-component may include activities and investments described below.

41. **Support the Ministry of Health and Social Welfare and the PHI to strengthen preventive health care and health system preparedness**, through activities and investments that:
(a) Develop capacity for disease surveillance, timely data analysis and decision-making by enhancing systems and protocols for data reporting, analysis, and dissemination, including linking primary health care providers to public health surveillance systems; and
(b) Support epidemiological investigation by expanding the number of public health workers trained to undertake disease detection and contact tracing.

42. **Support primary health care providers and the Ministry of Health and Social Welfare to strengthen primary care and reduce unnecessary utilization of hospital services**, through activities and investments that:
(a) Support the implementation of updated clinical guidelines and care pathways to strengthen preventative health care and shift management of complex, chronic conditions such as hypertension from hospitals to primary health care, thereby avoiding unnecessary hospitalization;
(b) Expand the provision of outpatient and ambulatory services for less-invasive diagnostics and procedures, such as hernia repair and cataract surgery; and
(c) Support the implementation of plans to optimize the numbers and distribution of the health care workforce (both clinical and administrative) to improve productivity.

43. **Support hospitals, the Ministry of Health and Social Welfare and the HIF to ensure efficient provision of in-patient hospital care, when such care is warranted**, through activities and investments that:

[23] The four patient groups will be selected from those patient groups that currently incur the greatest expenditure in hospital care, identified through the DRG payment system. The patient groups will be defined in the POM, prior to project effectiveness.

(a) Support the implementation of repriced selected services within the DRG system, so that reimbursement from the HIF to health care providers represents true cost and to incentivize the use of ambulatory and outpatient care where appropriate;[24] and
(b) Build capacity in, and expand the use of, health technology assessment in the HIF, to ensure that only cost-effective services are included in the benefits package.

44. **Support the HIF, ASKVA, the Ministry of Health and Social Welfare and health care providers to improve the quality of health care and patient satisfaction**, through activities and investments that:
(a) Develop systems and structures for regular collection, verification and reporting of health care quality, safety and patient satisfaction indicators at facility level;
(b) Where possible, merge and concentrate specialist services and diagnostics into fewer hospitals/ clinics/laboratories; and
(c) Introduce performance-based payments for clinical and health care managerial teams.

Sub-component 1.2. Strengthening management and financial sustainability of health care institutions (USD 3 million)

45. **This sub-component will support activities and investments to improve the financial stability of health care providers and the HIF,** thereby addressing constraints (c) and (d). Complementing the activities and investments in sub-component 1.1, this sub-component will focus on investments that build providers' capacity and strengthens their incentives to avoid budget overruns and arrears. Specifically, this sub-component may include activities and investments to:
(a) Improve the publicly-accessible database of arrears by health care provider;
(b) Purchase hardware and software to allow health care providers and the HIF to implement the treasury financial information system, and thereby improve their reporting on arrears, liabilities and financial risk;
(c) Revise contracting and accounting methods to comply with treasury system requirements; and
(d) Develop management information and communication technology, such as integrated hospital dashboards, to provide information on resources, activities, and key performance indicators (including feedback from service users).

Sub-component 1.3. Promoting linked institutional and policy reforms through performance-based conditions (USD 37 million)

46. **This is a results-based sub-component that introduces incentives for institutional and policy adjustments, which address the constraints underlying unsatisfactory quality of health care and financial sustainability set out earlier, thereby supporting achievement of the results chain**. The sub-component provides incentives that reward the government and other relevant health system authorities for making changes in the legislative and regulatory framework (that are not part of the planned DPF), as well as for day-to-day management of health care providers, that will enhance transparency and accountability for improved clinical and financial performance - constraints (a) to (d). The PBC will be designed to target regulatory and institutional bottlenecks to improving health sector performance, including fragmented and limited accountability for results, and thereby synergize with the investment component. Financing for this

[24] The project will not directly contribute to redundancies, but eventual job losses may result from rationalization and increased efficiency of health care insurance and health care services.

component will be provided based on four PBCs, each with around three sequential targets that trigger disbursement of project funds.

47. **The PBCs, disbursement-linked targets, disbursement schedule, and verification protocols have been developed in close consultation with the Ministry of Health and Social Welfare**. Disbursements will be 'scalable', meaning that early or partial fulfilment of the targets can trigger disbursement; advances may also be disbursed (subject to the PBC being fully achieved within the project duration). A verification mechanism (using an independent agency) will be agreed and set out in the Project Operations Manual (POM). The agreed PBCs are:

PBC 1. The percentage reduction in the rate of hospital admissions where the only recorded diagnosis is arterial hypertension, or where the principal diagnosis is uncomplicated arterial hypertension (addressing constraint (a));

PBC 2. Introduction of updated hospital reimbursement methods for four patient groups,[23] based on evidence-based care pathways (addressing constraint (b));

PBC 3. Completion of all technical and policy pre-requisites for transfer of primary health care providers to the treasury system, with actual transfer of 5 primary health care centers achieved (addressing constraint (c)); and,

PBC 4. Increase in the percentage of health care providers using patient satisfaction measures and service-user engagement in business planning, including publicly disclosed patient satisfaction rates (addressing constraint (d)).

48. **Eligible project expenditures linked to these PBCs will comprise the Ministry of Health and Social Welfare's contributions to the HIF to finance the insurance premiums of the poor and exempted,** in accordance with the Article 10(a) of the Law on Health Insurance in Republika Srpska. These contributions are substantial[25] and regular item on the Ministry's budget since they purchase health care insurance coverage through HIF, which then contracts health services from health care institutions for specific groups, such as the retired, vulnerable, children, unemployed, and other similar categories (which are all defined in the Law). These expenditures are, therefore, productive and necessary. The obligation to make these contributions is set under the Law, and the Ministry (and its predecessors and successors) is obliged to budget such funds every year. The amounts may vary, but the budget item always exists in the budget of Republika Srpska. Although these contributions could be considered as recurrent expenditure, achievement of the PBC will change the nature of such expenditure, by making health care insurance and health care services more efficient. Project expenditures in this sub-component in combination with the specified PBCs, therefore, directly contribute to achievement of the PDO. They also offer a means to monitor continuity and equity of access to the health care systems as efficiency reforms are undertaken. The eligibility criteria for these contributions will be detailed in the POM.

[25] BAM 106.5 million (USD 66.2 million, EUR 54.5 million) in 2021, according to the budget approved on December 31, 2020. This is around 20 percent of the HIF annual revenue.

Sub-component 1.4. Project management and monitoring (USD 3.42 million)

49. **This component will support project implementation,** providing overall administration of the project (including procurement and FM assessments and arrangements), as well as regular monitoring and evaluation (including beneficiary surveys), reporting of implementation progress, communication, and beneficiary feedback activities. Continued outreach to stakeholders to explain the rationale for reforms and build consensus for their implementation will be emphasized. Existing government structures and capacities at entity level will be used as much as possible. If necessary, these will be strengthened by appointment and/or recruitment of additional staff/consultants responsible for overall administration, implementation of the Environmental and Social Framework (ESF), communication and outreach, procurement, and FM. Local administrative structures and relevant specialized institutions at the local level will support the Project Implementation Units (PIUs) in project monitoring. Where appropriate, activities to overcome intergovernmental fragmentation and support collaboration between the two entities will be delivered through this component, such as aligning efforts to design and implement health service user surveys as part of project monitoring.

Component 2: Increasing health systems performance in the Federation of Bosnia and Herzegovina (USD 21.40 million)

50. **In the Federation, the project is designed to contribute to comprehensive reforms aimed at improving the quality of health care, financial sustainability, and more efficient management in both health care providers and health insurance funds.** The project will also support generation of information that will help decision makers at all levels of the health system identify health care needs, health service problems, and evidence-based solutions, including adaptation to EU requirements. In August 2019, all cantons were asked to state whether they were interested in participating in the project and to identify potential activities. All cantons expressed their agreement with the concept of the project and their commitment to participate. Further consultation with the relevant cantonal authorities will continue once the project becomes effective regarding the needs of the cantons, as well as respective roles and responsibilities during project implementation.

Sub-component 2.1. Improving the efficiency and quality of health care (USD 13 million)

51. **This sub-component will address constraints (a) and (b) by investing in goods, equipment and minor works to support FMoH to work with cantons to optimize the service network**, including strengthening preventive health care and health system preparedness; enhancing primary health care and day-care where appropriate; studying patient pathways to determine the true cost of health care for four patient groups to build upon the incipient DRG systems already developed in the Federation (for example by Herzegovina-Neretva Canton) and extending them to all health care providers for more patient groups; and enhancing citizen engagement to gather users' feedback on health care and health insurance. The FMoH also wishes to invest in harmonized information technology hardware and software across the 10 cantons' health systems. By supporting investment in information technology (IT) systems, the project will support establishment of accountability structures with clearly defined results for different levels of management (which can form the basis for performance incentives, both financial and non-financial), as well as improved human resource planning and management. The challenges posed by the COVID 19 pandemic also point to the need to

strengthen the role of public health in terms of timely provision of data and information for public health decision-making by strengthening systems and protocols for reporting, analyzing, and disseminating data and all public health capacities. These activities build upon the Health Sector Improvement Project (P149920) that was cancelled in 2017. Activities also align with proposed activities in Republika Srpska, as well as with activities related to the WB health sector project from 2017, but which remain in the Federation's Public Investment Program. Specifically, this sub-component may include activities and investments described below.

52. **Support federal and cantonal MoHs and PHIs to strengthen preventive health care and health systems preparedness** through investments that**:**
   (a) Develop disease surveillance (both NCDs and infectious disease) modules of health systems' current information systems and linking primary health care providers to them; and
   (b) Provide timely data and information for public health decision-making and response activities, by enhancing systems and protocols for data reporting, analysis, and dissemination.

53. **Support professional organizations, federal and cantonal MoHs to optimize health care networks**, through investments that:
   (a) Develop electronic health records in primary health care and secondary health care and develop an integrated information system that shares clinical and administrative information across primary health care centers, hospitals, public health institutes, and the Agency for Accreditation and Health Care Quality in Federation of Bosnia and Herzegovina (AKAZ), including procurement of IT equipment; and
   (b) Support the implementation of reforms to optimize the numbers and distribution of the health care workforce (both clinical and administrative) to improve productivity.[26]

54. **Support hospitals to deliver efficient in-patient care, when such care is warranted**, through investments that:
   (a) Improve hospital payment mechanisms to support provider monitoring and improvements in quality of health care;
   (b) Expand day-hospital care for selected, appropriate services that are currently provided as in-patient services;
   (c) Where possible, merge and concentrate specialist services and diagnostics into fewer hospitals/clinics/laboratories; and
   (d) Improve IT systems to achieve more transparent and efficient management, especially hospitals' financial management and cost control.

55. **Support AKAZ, health care providers, and federal and cantonal HIFs to improve the safety and quality of health care, including patient satisfaction,** through investments that:
   (a) Support the adoption of safety standards and quality accreditation in all health care providers;
   (b) Support the implementation of certification for all health care workers;
   (c) Strengthen programs for monitoring and improving the safety and quality of health care (including surveillance for adverse events) to enhance performance and accountability;

[26] The project will not directly contribute to redundancies, but eventual job loss may result from rationalization and increased efficiency of health care insurance and health care services.

(d) Introduce performance-based payments for clinical and health care managerial teams; and
(e) Strengthen the units in each health care provider responsible for quality monitoring and improvement, enhancing their capacity for analysis of quality indicators.

Sub-component 2.2. Strengthening management and financial sustainability of health care institutions (USD 7 million)

56. **This sub-component will support activities and investments to improve the financial stability of health care providers and HIFs,** thereby addressing constraints (c) and (d). Complementing the activities and investments in sub-component 2.1, this sub-component will focus on investments that build providers' capacity and strengthens their incentives to avoid budget overruns and arrears. Specifically, this sub-component may include activities and investments to:
(a) Acquire hardware and develop software to allow health care providers and HIFs to improve budget planning, execution and monitoring, including their reporting on arrears, liabilities, and financial risk;
(b) Develop integrated hospital dashboards to provide information on resources, activities, and key performance indicators (including waiting times and feedback from service users);
(c) Strengthen management and capacity of health care providers, federal and cantonal MoHs and HIFs to analyze health care needs; plan, pilot, and evaluate reforms; improve procurement; ensure efficient contracting of health services; and undertake effective restructuring and financial consolidation of health care providers; and
(d) Establish a publicly-accessible database of arrears by health care facility.

Sub-component 2.3. Project management and monitoring (USD 1.40 million)[27]

57. **This component will support project implementation**, providing overall administration of the project (including procurement and FM assessments and arrangements), as well as regular monitoring and evaluation (including beneficiary surveys), reporting of implementation, communication, and beneficiary feedback activities. Continued outreach to stakeholders to explain the rationale for reforms and build consensus for their implementation will be emphasized. Where appropriate, activities to overcome intergovernmental fragmentation and support collaboration between the two entities will be delivered through this component, such as aligning efforts to design and implement health service user surveys as part of project monitoring. Existing government structures and capacities at entity level will be used as much as possible. If necessary, these will be strengthened by appointment and/or recruitment of additional staff/consultants responsible for overall administration, implementation of the ESF, communication and outreach, procurement, and FM. Local administrative structures and relevant specialized institutions at the local level will support the PIU in project monitoring.

58. **In summary, an overview of how the project and linked activities address the key constraints underlying unsatisfactory health care quality and poor financial sustainability is given in Table 3.**

[27] Financing for project management and monitoring is distributed between Republika Srpska and the Federation of Bosnia and Herzegovina in proportion to Components 1 and 2. In particular, verification of the achievement of PBC (sub-component 1.3) requires a greater budget for project management and monitoring in Republika Srpska.

Table 3: Addressing key constraints underlying unsatisfactory health care quality and poor financial sustainability

	This project				
Key constraint	**Components,** activities and investments	**PBC**	**Results**	**Planned DPF** (selected elements)	**Planned TF** (selected elements)
(a) Weaknesses in preventive and primary health care	**Sub-components 1.1; 2.1 (quality and efficiency)** - Strengthen preventive health care and health system preparedness - Strengthen primary care and reduce unnecessary use of hospital services	PBC 1	PDO indicators 1, 2	New laws on health care, health insurance, health chambers, and health documentation and records in health care In FBiH, adoption of law on health sector restructuring and financial consolidation	Preparatory study of bottlenecks in the management of NCDs in primary care Preparatory study to expand advanced, nurse-led primary care
(b) Inefficiencies in hospital care	**Sub-components 1.1; 2.1 (quality and efficiency)** - Support efficient provision of in-patient hospital care, when such care is warranted	PBC 2	PDO indicators 1, 3	Adoption of new laws on health care, health insurance, health chambers, and health documentation and records in health care	Preparatory study of workforce distribution and productivity, with options for optimization
(c) Lack of effective financial controls	**Sub-components 1.2; 2.2 (management and sustainability)** - Improve transparency, accountability, and financial stability	PBC 3	PDO indicator 3	Adoption of law on health sector restructuring and financial consolidation Implementation of treasury systems to control commitments and spending	Preparatory study to revise contracting and accounting methods to comply with treasury system requirements
(d) Weaknesses in incentives and account-ability	**Sub-components 1.1; 2.1 (quality and efficiency)** **Sub-components 1.2; 2.2 (management and sustainability)** - Improve the quality of health care and patient satisfaction	PBC 4	PDO indicators 1, 2, 3	Implementation of systems to strengthen performance management and incentives for managers and health workers	Preparatory study to undertake self-assessments of transparency and accountability and identify steps for strengthening

(e) Under-funded health care systems	Technical assistance and policy dialogue to guide possible reforms on expanding the revenue base for the health systems.

C. Project Beneficiaries

59. **Direct beneficiaries of the project will be the MoH of the Federation of Bosnia and Herzegovina, the Ministry of Health and Social Welfare of Republika Srpska, HIFs, ASKVA, AKAZ, and health care facilities, including clinical and managerial staff.** Efforts to improve quality and efficiency of health care through monitoring, improved internal management procedures, and use of citizen feedback to strengthen accountability will benefit health facilities at all levels (public health institutes, hospitals, and primary care facilities) and, ultimately, the users of BiH's health care systems, that is, the general public.

60. **Patients and their care takers, particularly the elderly and people with chronic conditions, will benefit from better performing health systems**. The project will promote better quality and more responsive health services for both women and men, as well as for infants, children, working age adults and senior citizens. Special attention will be given to monitor service coverage of, and use of health care services by, underserved populations, including those groups that are not registered by the HIFs (such as the Roma community). One of the intermediate result indicators also measures engagement of key beneficiaries, by focusing on citizen feedback as an accountability mechanism to improve health system performance.

Gender

61. **As in the rest of Western Balkans, life expectancy in BiH for women (79.7 years at birth) exceeds that for men (74.8 years)**. Adverse health risks, such as smoking, unhealthy diet, or excessive alcohol consumption are all more prevalent among men in BiH compared to women. There is also extensive evidence, however, of a poorer standard of health care for men compared to women. In a 2012 survey of men and women with elevated blood pressure,[28] less than half (48.6 percent) of men were aware of their hypertensive status, and fewer men (40.2 percent) were aware of their diagnosis than women (57.2 percent). Treatment was relatively high amongst both men and women; *effective* treatment, however, was low, with only 25.4 percent of hypertensive men achieving a satisfactory blood pressure compared to 41.0 percent women. Across the entire hypertensive population (including those not treated), therefore, only 9.0 percent of hypertensive men had a safe blood pressure, compared to 22.2 percent of hypertensive women. The higher prevalence of adverse risk factors, exacerbated by less effective management of hypertension amongst men, culminates in inequitable health outcomes along gender lines, as premature mortality for a wide range of NCDs (including strokes, heart attacks, and diabetes) amongst men nearly doubles that of women in Bosnia and Herzegovina (23.1 vs. 13.2 percent).[29] Given that high blood pressure is the most salient modifiable risk factor for these NCDs, early detection and effective management is critical to improve individual and population health outcomes.

62. **Using the preceding data as a baseline, the project will address, monitor, and seek to close the gender gap in the diagnosis and management of hypertension.** The data in the preceding paragraph point to two key bottlenecks in health care for men: a) effective screening and diagnosis to identify hypertension; and b)

[28] Pilav A, Doder V and S Brankovic (2014) Awareness, treatment and control of hypertension in the Federation of Bosnia and Herzegovina over the past decade. *Journal of Public Health Research* 3:323.
[29] World Health Organization (2016) Global Health Observatory Data Repository – Mortality from CVD, cancer, diabetes, or CRD between exact ages 30 and 70, Bosnia and Herzegovina.

effective treatment to achieve control of hypertension. Accordingly, relevant project activities will be designed and implemented with the aim of helping close this gender gap. Specifically, disease surveillance modules will be adapted to ensure that accurate gender-disaggregated data on the prevalence of hypertension is collected, analyzed, and reported; clinical guidelines and care pathways to improve the diagnosis and treatment of hypertension will be designed to identify and address men's distinct health care needs and specific barriers to accessing health care; and health care quality agencies' indicators and programs for improving the quality of health care (including initiatives to introduce performance-based payments) will be revised to place new emphasis on closing the gender gap in the diagnosis and effective control of hypertension. Technical experts from the *Primary Health Care Performance Initiative*[30] will be engaged to support these activities. The project will also monitor the gap between the percentage of hypertensive men and the percentage of hypertensive women whose hypertension is adequately controlled as an intermediate result indicator. This indicator supports achievement of PDO indicator 2.

63. **Improving the quality of health care for women will also be a distinct focus in the project, particularly for women from marginalized communities.** Women's self-assessed health and satisfaction with health care in BiH is marginally worse than men's. The share of women assessing their health as "very good" and "good" is 22 and 37 percent respectively, compared to 27 and 41 percent among men. In addition, slightly fewer women (43 percent) report being satisfied with health care in BiH than men (46 percent).[31] This may reflect poorer access or health care quality. Assessing this is difficult, however, because ASKVA and AKAZ do not routinely disaggregate health care quality indicators by gender. Accordingly, AKAZ, ASKVA and health care providers will be supported to integrate gender-sensitive elements in project activities - for example, by mandatory disaggregation of data, including patient satisfaction, by gender. Further disaggregation to monitor and address the experience of more marginalized women (such as older women and Roma women) will also be encouraged. The project also plans to enhance gender focus in citizen engagement activities and in strengthening accountability to patients by improving feedback mechanisms (Box 3). Local health authorities and health care providers will be encouraged to establish women health ambassadors/committees in their communities and train and engage women for local action to help improve accountability, improve service provision, and address most important challenges and needs of women regarding health services. Again, the needs of more marginalized women will be specifically addressed.

64. **The project also has potential to tackle barriers preventing women accessing good jobs in the health care sector.** The project includes activities that measure and improve managerial skills and competence. Some activities may be preferentially directed towards women. Analysis of the barriers and disincentives to hire and promote women,[32] for example, could be undertaken by applying the World Management Survey to the BiH health sector (Box 2), leading to policy actions to overcome these barriers. Activities to optimize service design and service delivery may also emphasize an expanded role for nurses (a job usually performed by women), to increase the competence and status of this profession within the health sector. The WB manages a TF (supported by the Swiss Agency for Development and Cooperation) aimed at building a knowledge base

[30] The *Primary Health Care Performance Initiative* (improvingphc.org) is a partnership between the WB, WHO, and Bill and Melinda Gates Foundation in collaboration with Results for Development and Ariadne Labs. Its mission is to improve primary care globally through better measurement and evidence-based improvement strategies.

[31] *Gender Analysis Report for BiH;* USAID, 2016.Available from http://www.measurebih.com

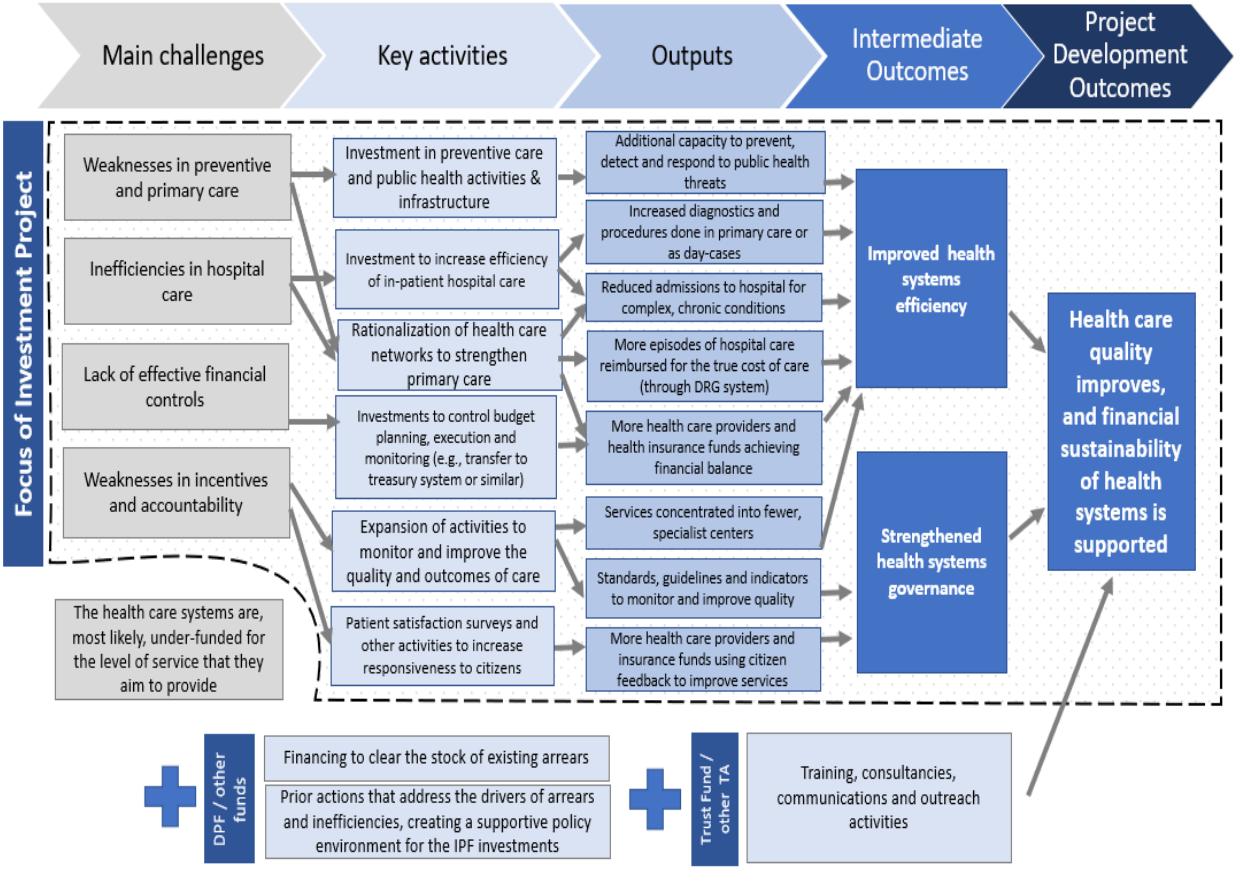
[32] In BiH, women opt mostly for secondary degrees in education, social sciences, health, and law, and exhibit a preference for the public sector (which employs 37 percent of women). Yet women's employment levels and access to good jobs trail those of men's at all ages.

and promoting evidence-based policymaking to tackle gender inequalities, which will be accessed to support gender-sensitive activities and monitoring within the project.

D. Results Chain

65. **This project represents a foundational step in the process of securing long-term sustainability and quality of BiH's health care systems**. This project will offer a package of technical and financial assistance that invests in quality and efficiency improvements for front line services, alongside the flexible financing needed to stop the accumulation of health sector arrears without compromising service access and quality. Crucially, the project will construct a network of incentives, both financial and non-financial, positive and negative, short- and long-term, in the areas of FM and service quality, thereby laying the foundations for longer-term and more challenging reforms in Republika Srpska and the Federation of Bosnia and Herzegovina, such as functional or structural integration of insurers and/or health care providers. The project's theory of change is presented in Figure 1 below (for ease of reading, only the principal links in the chain are shown).

Figure 1: The project's Theory of Change



66. **The emphasis of this project is on improving performance within the current resource envelope while laying the foundations for longer-term sustainability**. It is anticipated that complementary structural reforms – including reforms affecting revenues, coverage, and equalization mechanisms for mandatory health insurance -- will be addressed through IMF support. Discussions have commenced with the IMF to harmonize efforts in this regard.

E. Rationale for Bank Involvement and Role of Partners

67. **The WB has extensive experience in helping health systems in the region improve performance, including tackling the accumulation of arrears.** Previous analytical activities, as well as programs of financial assistance, in Eastern European health systems have established a solid body of experience in addressing the issues facing BiH's health systems. This is complemented by a deep understanding of the sector context in BiH, through the analytics described in Box 2. The *Functional Review* also provides political momentum for WB engagement; its recommendations having been discussed and ratified in two high-level political fora that brought together the major political parties, as well as international and national development partners. Over the past 18 months, the WB has become a trusted partner to leaders and decision makers in the health sector of both entities. Consultation with local politicians and professional groups allowed the WB to develop a high-level narrative around the challenges and opportunities for health sector reform in BiH. Insights from analytical work, which included speaking to both patients and the general public, have helped in setting a long-term vision for a patient-centered and performance-focused health system.

68. **Governments in each entity have formally requested WB engagement, articulating where they most need assistance in designing and delivering health sector reform.** In March 2019, the government in Republika Srpska requested WB assistance in designing and implementing their 'first 100-days' agenda for the health sector. The reform program aligns closely with the proposed project activities, and draws heavily upon WB analytics, policy recommendations, and implementation roadmaps. In January 2020, the FMoH in the Federation of Bosnia and Herzegovina wrote to the WB proposing collaboration to strengthen monitoring and evaluation of health sector performance, to enhance effectiveness of the health system, and improve the safety and quality of health care.

69. **Development partners are aligned behind WB's vision for health sector reform in BiH**. Health sector development partners have a standing mechanism for coordination (the "Health Donors Co-ordination Group", which meets roughly semi-annually); participants include international development partners (the European Commission, World Health Organization (WHO), the United Nations Children's Fund (UNICEF), and other United Nations agencies) as well as bilateral donors (the Embassies of the United Kingdom, Switzerland, Germany, Turkey, and Slovakia). The Co-ordination Group has endorsed the conclusions and policy recommendations in the WB's *Functional Review of the Health Sector* as the basis for health sector reform. Individual donors have expressed interest in providing co-financing to support various aspects of TA (for example the British Embassy expressed willingness to co-finance the strengthening of direct accountability to citizens for health system performance).

F. Lessons Learned and Reflected in Project Design

70. **The WB's technical support in the health sector builds on a long history of partnership (since the mid-1990s) between the WB and BiH.** As such, the WB has a repository of experience and lessons learned in the

implementation of health sector projects in BiH, which serve as a foundation for the proposed engagement. Lessons from the most recent loan (the *Health Sector Enhancement Project*, 2005-2011, and its Additional Financing, 2011-2014;) are reflected in this engagement, including the need for: (a) flexibility from the WB side to adjust to client-specific institutional arrangements; (b) careful consideration of project implementation arrangements to ensure smooth implementation of project activities; and (c) seeking/obtaining assurance of buy-in and direct involvement of the implementing agencies, professional groups, and service users in project preparation, design, and objectives.

71. **Lessons are also drawn from the *Health Sector Improvement Project* (P149920), that was dropped in late 2017 at the appraisal stage.** These include: (a) ensuring a well-defined and commonly-owned long-term vision of the health sector reform, to protect against 'scale-back and drift' in project activities and objectives that can occur when addressing problems of the level of complexity found in BiH; (b) carefully assessing, concurrently, the capacity of the implementing institutions to absorb both technical and financial assistance, and not overloading them with excessively ambitious project activities and objectives; (c) carefully formalizing the working arrangements between the implementing agency staff and the consultants providing the TA, particularly in the fragmented governance environment of Federation of Bosnia and Herzegovina; (d) ensuring ownership among technical staff (not just senior officials); and finally (e) using clearly identified and measurable indicators and targets from the start of the project to facilitate measurement of progress towards achievement of the PDO. It is also worth noting that the context for the current project preparation is substantially different to that of the dropped project: better alignment now exists between MoFs and MoHs in both entities, with a shared commitment to jointly tackle health systems arrears and improve health systems performance.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

72. **Given the complex governance within BiH, institutional and implementation arrangements have been designed to be as practical and reliable as possible**. Accordingly, institutional and implementation arrangements build upon existing structures and systems in each entity, to the extent possible. In Republika Srpska, the Ministry of Health and Social Welfare has a Planning, Analysis, Financing, and Project Implementation Department (PAFPID) that has experience with the implementation of WB-financed projects, in both the health and social assistance sectors. In the Federation of Bosnia and Herzegovina, the MoH has successfully implemented WB-financed projects in the past. Key individuals from earlier PIUs remain employees within the government and have been recently reconvened to establish a PIU for the Bosnia and Herzegovina Emergency COVID-19 Project (P173809).

73. **In Republika Srpska, project implementation will be carried out by the PAFPID in the Ministry of Health and Social Welfare**, led by the Assistant Minister for Planning, Analysis, Financing, and Project Implementation and will rely on existing government structures. In addition to PAFPID, the Ministry of Health and Social Welfare (and other government departments, if need be) will provide all other necessary staff to assist with procurement; the ESF; monitoring and evaluation; and resolution of complaints and communications. The PAFPID will directly implement and coordinate project activities, including

procurement, monitoring and evaluation, and communication, coordinating with other departments or units in the Ministry, as necessary. The PAFPID will also establish partnerships with ASKVA, the HIF, and other agencies, as needed (such as the Institute for Public Health). Some activities, such as training, may be outsourced to third parties through contractual agreements acceptable to the WB. The PAFPID will also be responsible for preparing a consolidated activity and financial report for the project. It will gather and, together with other stakeholders, analyze all relevant monitoring data, and report these to the Minister of Health and Social Welfare, and to the WB. A POM clearly describing the roles, responsibilities, and processes will be developed by the Ministry.

74. **In the Federation, implementation of the project will be carried out by the FMoH and existing government structures.** The PIU responsible for implementing the Bosnia and Herzegovina Emergency COVID-19 Project (P173809) will be responsible for overall coordination and implementation of this project. This PIU will be expanded as necessary to ensure adequate capacity in the roles of Project Coordinator, FM Specialist, and Procurement Specialist. In addition to the PIU, the FMoH (and other government departments, as needed) will provide all other necessary staff on procurement, FM, the ESF, monitoring and evaluation, and communication. The PIU will establish partnerships with the Agency for Accreditation and Health Care Quality in Federation of Bosnia and Herzegovina (*Agencija za kvalitet i akreditaciju u zdravstvu u Federaciji BiH,* AKAZ), HIFs and other agencies, as needed (such as the Institute for Public Health), to support project implementation and monitoring. The PIU will also establish project support groups at the cantonal level (including cantonal MoH and public health institutes). Some other activities, such as training, may be outsourced to third parties through contractual agreements acceptable to the WB. The PIU will also be responsible for preparing a consolidated activity and financial report for the project and will submit an implementation status report to the WB. A POM clearly describing the roles, responsibilities, and processes will be developed by the FMoH.

B. Results Monitoring and Evaluation Arrangements

75. **In Republika Srpska, through the PAFPID, the Ministry of Health and Social Welfare will be responsible for monitoring and evaluation activities,** including: (a) collecting and consolidating all data related to indicators from the relevant public authorities; (b) evaluating results; (c) providing the relevant performance information to the Minister of Health and Social Welfare; (d) facilitating verification of PBC achievement; and (e) reporting results to the WB on a quarterly basis. Each Ministry division engaged in project activities and PAFPID will perform their project-related functions in accordance with the methodology prescribed in the POM. Each such Ministry division will appoint an Assistant Minister to be responsible for timely provision of project monitoring data.

76. **In the Federation, the PIU in the MoH will be responsible for collecting, analyzing, and reporting project monitoring data.** The PIU will submit quarterly reports elaborating on physical and financial progress, and reporting on agreed results indicators to the WB.

C. Sustainability

77. **Assessment of the project's sustainability requires consideration of both financial and political factors.** To maximize financial sustainability, the project is supporting interventions that are designed to reduce overspending in BiH's health systems and increase effective spending, whilst improving the quality and

outcomes of health care. However, even with optimally efficient service design and delivery, it remains likely that BiH's health systems are under-funded for the level of service that they aim to provide. Therefore, structural reforms will be needed to expand the revenue base for health. During project preparation, entity-level MoFs have indicated that they are willing to consider this if they are assured that the necessary reforms to optimize quality and efficiency on the front line are being implemented. Relevant TA will also enhance the impact and sustainability of the project's activities (Annex 5).

78. **Concerns around political sustainability are, to a large extent, allayed by the fact that both entities are preparing new health sector laws that are fully aligned with the objectives and activities of the project**. To further maximize political sustainability and ownership of reforms, project design was developed through an intensive consultation process with prime ministers' offices, MoFs and MoHs, PHIs, quality agencies, and professional associations in both entities, as well as cantonal and local authorities, development partners, and other health sector stakeholders. The project will be complemented by the planned DPF that supports implementation of legal and regulatory changes that will help anchor and sustain this project's investments, as well as address issues related to prevention and clearance of arrears, and overall fiscal sustainability of health financing. The project will support continued consultation, stakeholder and citizen engagement to, build consensus on, and sustain reforms.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

Strategic orientation and timing of the operation

79. **Critically, the project addresses quality and financial sustainability together as twin goals that should be optimized to improve the performance of BiH's health systems**. Health care quality and financial sustainability are intrinsically related. Low quality of health care can be costly in terms of human suffering and loss, with 10 to 15 percent of total deaths in low- and middle-income countries attributable to ineffective or unsafe health care. Poor quality also generates waste because a poor-quality health system is technically and allocatively inefficient. Avoidable hospital admissions, for example, are a major source of inefficiency. Hence, the project focuses on feasible, foundational actions to place the sector on the path towards continuously improving clinical and financial sustainability, tackling the immediate issue of financial imbalance, without compromising quality.

80. **The shock of the COVID-19 pandemic means that this is the moment for far-reaching reform.** Increasing numbers of COVID-19 cases is placing a huge strain on health care authorities, insurers, and providers, which have to provide health care for the unprecedented number of COVID-19 patients and their contacts at the same time as making sure that people with on-going medical needs or emergencies can still get help. Some hospitals are responding by substantially increasing the threshold for admitting patients to make more beds available for COVID-19 patients; others are simply closing some services. The net result is that only the sickest are being admitted and any surgery that could reasonably wait is canceled, which frees up surgeons, internal medicine doctors, and others to help in emergency departments. Maintaining this trend moving forward would require purposefully shifting of procedures like simple surgical procedures, management of chronic

conditions and chemotherapy to outpatient departments, clinics, and the use of home care. On the positive side, reducing or even eliminating in-patient stay for many surgical procedures may be beneficial if it results in sharp reductions in infection rates, post-surgical complications, and costs. The COVID-19 outbreak provides an opportunity for modernizing the health care network in BiH, strengthening FM and fiscal discipline, and incentivizing management and staff to maintain high levels of efficiency and quality of care.

Choice of instrument

81. **An IPF operation, with an accompanying DPF and linked TA, is the most appropriate instrument for the proposed package of technical and financial assistance.** Both investment and reform are needed to bring about new ways of organizing and managing health care services, so that arrears do not continue accumulating. At the same time, governments' foremost priority is to address health sector arrears, and financial assistance to do so is the primary basis of their request for WB engagement. An IPF can support the aims of both immediately addressing the stock of arrears and helping prevent further accumulation of arrears. A Program-for-Results instrument is not appropriate at this stage because the sector still needs some investments to strengthen its foundations, as well as regulatory reforms.

82. **In Republika Srpska, the PBC component acts as an incentive to enact difficult reforms and achieve 'stretch goals', beyond simply procuring goods and services and implementing activities, while releasing disbursement of financing.** Achievement of PBCs will generate both savings (through efficiency gains) as well as additional cash flow by reimbursing some of the government's direct financial contributions to the health system (for people unable to contribute to the health insurance system themselves). It has been agreed that a substantial proportion of funds flowing through the PBC sub-component will be transferred to the Ministry of Health and Social Welfare to ensure that the financial incentive to complete reform objectives is directed toward the authority principally responsible for the task. Both the Ministry of Finance and the Ministry of Health and Social Welfare have confirmed that they agree with this approach. The Republika Srpska Ministry of Finance's plan to first clear arrears to the HIF and to the tax authorities confirms this approach, as improving liquidity in these institutions will release funds back to health care services for health system strengthening. In addition, PBC 3 relates directly to prior actions in the planned DPF, providing a sustained incentive for improved FM in the health sector.

Selection of activities within the project

83. **The design of the project is based upon analytical and advisory engagement that the WB has established with the health authorities in BiH over several years.** This work includes the *Health Care Arrears in Bosnia and Herzegovina* (P161510), undertaken jointly with the WB's Macroeconomics, Trade and Investment Practice, and more recently a *Functional Review of the Health Sector* (P167607), undertaken jointly with the Governance Practice. Project activities are also aligned with the recommendations made in these reports. In particular, the report *Health Care Arrears in Bosnia and Herzegovina* sets out a strategy for arrears clearance, focused on verification, clearance, and prevention of further accumulation through reforms at system- and institution-level to ensure that cleared arrears do not simply reaccumulate; this strategy has been translated into the design of sub-components 1.3 and 2.3 of the project.

84. **Specific activities within this project were identified through a structured process with counterparts**. The foremost criterion was firm political commitment to enact reforms, signaled by actions included in the

Republika Srpska Economic Reform Program and *Joint 2019-2022 Socio-Economic Reform Program*. Reforms that would be difficult to achieve without WB assistance were also prioritized. Other criteria included the need to predominantly finance new policies, practices, and behavior (rather than goods or works, except where this would lead to better health care quality or efficiency, such as enabling day-case surgery); the need for coherence across entities and cantons in the selection of activities; catalytic potential (the potential to spread to other public services or, within the Federation of Bosnia and Herzegovina, to spread across cantons); and, ideally, positive impact on vulnerable groups. Project activities were discussed with working groups created specifically to guide project design in Republika Srpska (on health care quality, governance, and financing) and in the Federation of Bosnia and Herzegovina (in Sarajevo, Herzegovina-Neretva, and Tuzla Cantons). In each case, the working groups comprised Directors from the HIFs and from health care providers, the quality agencies, senior officials from the ministries of health, and professional leaders. More detailed technical justification and evidence for the project activities are included in Annex 3. Technical Appraisal**.**

Linkages of the project with planned health sector DPF and TF

85. **The complexity and persistence of challenges in BiH's health systems require an ambitious and sustained program of technical and financial assistance.** An IPF in isolation cannot offer the comprehensive mix of short- and long-term incentives, or the investment and technical support needed to tackle the problems of unsatisfactory quality and accumulating arrears. Accordingly, this project has been designed to act in concert with a linked DPF, and a linked MDTF offering TA, as well as other potential sources of assistance such as the IMF.

86. **The linked DPF will help clear the stock of existing arrears in the health systems (Pillar 1 in Table 4).** The planned DPF is focused on the health sector specifically and comprises two pillars: a) improving the efficiency and sustainability of health systems; and b) enhancing quality of health care services delivery. The prior actions (that is, required reforms) in each pillar address the drivers of accumulation of arrears and inefficiencies in the health sector, thereby creating the policy environment that can anchor the IPF and sustain its impacts. An overview of the reforms incentivized by the planned DPF is given in Table 4 below.

Table 4: Summary of prior actions in the planned health sector DPF operation (provisional list)

	Year 1	Year 2
Pillar 1: Improving the efficiency and sustainability of health systems.	Clearance of the stock of arrears in each entity. Start of introduction of treasury system across health care providers in Republika Srpska.	Adoption of plans to prevent further accumulation of arrears across principal health care providers in Federation of BiH. Completion of introduction of treasury system across health care providers in Republika Srpska.
Pillar 2: Enhancing quality of health care services delivery.	Adoption of laws on health care, health insurance, health chambers, and health documentation and	Adoption of health care network plan in Republika Srpska.

	records in health care in Republika Srpska. Quality and efficiency incentives in contracts between health insurance fund and health care providers.	Introduction of performance-based contracts between health care providers and health care workers. Adoption of clean air laws in the Federation.

87. **The planned DPF will only provide a share of the needed financing to clear arrears.** Other sources of financing (IMF, other multilateral or bilateral development partners, commercial financing, own revenues) will be needed to fully finance a plan for clearing arrears. The path for clearance of arrears and identifying financing sources will also need to consider the likely worsening fiscal situation in the aftermath of the COVID-19 pandemic, tighter financing conditions in both domestic and international markets as well as allocation of partner resources to the COVID-19 emergency and recovery.

88. **Finally, to leverage maximum impact from the project, a linked MDTF is being established.** The TF will provide necessary activities, including training, consultancies, communications and outreach activities that complement the project and the planned DPF, providing substantial additionality and enhancing the sustainability of the project's impact. Activities financed by the MDTF are fully aligned with the planned investment program and are critical either in terms of providing the enabling conditions for the establishment of the investment program and/or its sustained success. As described below, activities are either Bank- or recipient-executed. Annex 5 provides more details on the activities to be supported by the MDTF.

- Bank-executed: analytics and advisory services that draw upon the expertise of the WB, development partners, and contracted consultants.
- Recipient-executed: practical activities (such as training) that are best delivered by the relevant local agencies, and/or analyses and reforms, which carry greater political, institutional or implementation risk and, therefore, need a high degree of local ownership. Activities financed through this RETF are distinct from, and will not be financed by, the project.

Economic Analysis

89. **There is a strong economic rationale for investing in improvement in the quality of health care and in the financial sustainability of BiH's health care systems.** The resources provided by the project will help increase sustainability and quality of, and will generate efficiency gains from, implementing measures for better accountability of the system and discontinuation of accumulation of arrears, restructuring of the hospital activities in the interest of building stronger primary health care, which can help prevent avoidable hospitalizations, and shifting inpatient care to outpatient levels, when possible.

90. **A cost-benefit analysis was conducted, focusing on a comparison of the monetary estimate of benefits of implementing the project activities and estimating possible redistribution of the available fiscal space**. The analysis presents a model for potential gains in health status from improvement of quality of health care, and estimates the impact of interventions for improved purchasing of medicines, cleaning of arrears and shifting hospital care to outpatient level by strengthening primary care and prevention of ambulatory-sensitive hospitalizations. The full cost of the project was distributed across the period of 2022-2028. Impacts

were estimated from the literature, or similar WB investments, and projected for the lifetime of the project.

91. **It is not possible to quantify all economic benefits potentially generated by the project.** Significant increases in the share of public expenditure or increased share of GDP invested in health are not expected. The economic analysis, therefore, focuses on estimating benefits from improved health outcomes and improvements of efficiency within the available fiscal space:
    (a) gains of health outcomes from increased quality of health care;
    (b) savings from more efficient procurement; and,
    (c) results from improved management of ambulatory-sensitive conditions and prevention of avoidable hospitalizations.

92. **These analyses are combined to give a cumulative estimate of health impact and efficiency gains of the proposed investment.** The analysis uses quantitative information obtained from literature review. It also relies on several assumptions, in line with previous economic analyses conducted for WB-financed projects in the health sector.

93. **The costs of the project are mostly determined by its expenditures.** The investment in the project will amount to a total of USD 75 million. Total expenditure of the project is expected to grow incrementally, as presented in Table 5.

Table 5. Total expenditures associated with implementation of the project

	2022	2023	2024	2025	2026	2027	2028	2022-2028
Project expenditures (million USD), by year	0.7	4.3	5.1	8.0	21.2	20.5	15.2	75.0
Project cost as % of health expenditures	0.0	0.2	0.3	0.4	1.1	1.0	0.7	Average 0.5%

94. **The assumptions used in the cost-benefit analysis are described below.**
- ***Basic discount rate*.** Financial costs (project costs) and financial savings (from project interventions) were discounted at 4.5 percent to account for future inflation and the time value of money. A higher discount rate of 10 percent was used in the high scenario.
- ***Health benefits*.** The health benefits were calculated based on the potential reductions in disability-adjusted life years (DALYs) related to cardiovascular diseases (CVD). The DALYs for BiH were obtained from the Institute for Health Metrics and Evaluation and were projected until 2027 for a 'no intervention' scenario based on historical trends between 2010 and 2019.
- ***Monetary value of health benefits*.** In the baseline and low scenarios, each DALY was valued at GDP per capita (USD 6,073 in 2019, with respective projections). In the high scenario, each DALY was assigned a value of two times the per capita GDP, as commonly used in the benefit-cost analysis literature.[33]
- ***Discount rate of the monetary value of future health benefits*.** The monetary value of the future stream of health benefits (annual DALYs averted) is discounted at 3 percent based on the recommendations

[33] Chang, A., S. Horton, and D. T. Jamison (2018). "Benefit-Cost Analysis in Disease Control Priorities." In Disease Control Priorities (third edition): Volume 9, Improving Health and Reducing Poverty, edited by D. T. Jamison, H. Gelband, S. Horton, P. Jha, R. Laxminarayan, C. N. Mock, and R. Nugent. Washington, DC: World Bank.

outlined by WHO's Disease Control Priorities Project.[34] In the low scenario, the discount rate is set at 7 percent.

95. **Under the baseline scenario, the combined net present value of the project is estimated to be USD 149.6 million**. The combined benefit-cost ratio for the project is estimated to be 4.3, and the internal rate of return 19 percent. Even under the low scenario, the project demonstrates a significant development impact with a benefit-cost ratio of 3.7, and a net present value of USD 130 million. An additional calculation for a more conservative estimate of 1 DALY gained, at 70 percent of per capita GDP, was performed to account for the fact that CVD usually affects older adults. The benefit-cost ratio of 1.3 for the project in this case is suggesting that every USD invested will return at least USD 1.3 in benefits. It is important to note that even the baseline scenario is conservative and likely to underestimate the full impact of the project, and not include the potential impact of several cross-cutting interventions, including additional efficiency gains. Spillover effects from strengthening the purchasing function and better accountability of health care providers are also expected to generate substantial benefits across the health care system. In addition to the productivity losses associated with CVDs, chronic diseases can lead to impoverishment due to the high associated health expenses. Chronic diseases require longer periods of inpatient, outpatient, and drug treatment than acute communicable diseases. By preventing and treating CVDs and other chronic conditions more effectively, the project is also expected to avert some of the macroeconomic and microeconomic costs of diseases.

B. Fiduciary

Financial Management (FM)

96. **Responsibility for the project's FM arrangements will rest with the respective units/departments responsible for project implementation in the relevant entity ministries, which will maintain a satisfactory project accounting system, capable of tracking all project resources and expenditures and generating regular financial reports.** The existing FM arrangements of the units/departments responsible for project implementation (namely, the PAFPID in the Republika Srpska, and the PIU in the Federation of Bosnia and Herzegovina) have been assessed to determine if these arrangements (budgeting, accounting, reporting, internal control, staffing, funds flow, and audit) are satisfactory to the WB. Subject to implementation of the agreed action plan laid out below, the FM arrangements are considered to meet the minimum requirements of the WB Operational Policies.

97. **The PAFPID and PIU responsible for project implementation have relevant experience in implementing WB-financed health projects.** The units/departments have implemented the initial Health Sector Enhancement Project, for which the initial financing became effective in April 2006, and the additional financing for the same project, which became effective in December 2011 and closed in December 2014, as well as other health sector projects. In addition, the same units/departments have successfully implemented a WB-funded grant titled 'Reducing Health Risk Factors' over the period of February 2018 through June 2019. Finally, these units/departments responsible for project implementation have also been implementing the Emergency COVID-19 Response Project (P173809).

98. **An action plan has been agreed to further strengthen the project's FM arrangements.** These actions

[34] http://dcp-3.org/

include a) formally assigning FM specialists to perform fiduciary functions under the project to the units/departments responsible for project implementation; b) purchasing, renewing or maintaining the project accounting software license for the project; and c) updating the FM sections of the POMs.

99. **The PAFPID in Republika Srpska and the PIU in the Federation of Bosnia and Herzegovina will prepare quarterly interim financial reports (IFRs).** These will include sections on Sources and Uses of Funds, Uses of Funds by Project Activity, Statement of Financial Position, Designated Account (DA) Reconciliation Statement, Statement of Expenditure (SOE) Withdrawal Schedule, and a report on project expenditures linked to PBCs. The units/departments shall prepare and furnish to the WB, not later than 45 days after the end of each calendar quarter, IFRs for the project covering the quarter, in form and substance satisfactory to the WB.

100. **The units/departments will be responsible for the timely compilation of the annual project financial statements for an independent external audit.** Project financial statements (including SOE, DA activities and, in Republika Srpska, audit of the project expenditures linked to PBCs) will be audited by an independent auditor acceptable to the WB and contracted by the Ministry of Finance and Treasury of BiH (more detailed information is presented in Annex 1). Each audit of the financial statements shall cover the period of one fiscal year of the Borrower, commencing with the fiscal year in which the first withdrawal was made under the loan. The terms of reference for the audit have been agreed with the WB and will be attached to the Minutes of Negotiations.

101. **In addition, the auditors are expected to deliver management recommendation letters in relation to the project.** Each management recommendation letter will identify internal control deficiencies and accounting issues, if any. Audit reports, audited financial statements, and management recommendation letters will be delivered to the WB within six months of the end of each fiscal year. The audited project financial statements will be made publicly available in a timely fashion, and in a manner acceptable to the WB.

102. **Project Expenditures.** The project will finance TA, medical and non-medical equipment, training, and minor rehabilitation for some facilities to implement strengthened health system preparedness, implement more efficient service delivery models (ambulatory surgeries and other procedures, day-hospital care, and disease management programs), and strengthen FM within health care institutions. TA will focus on reforms for priority patient groups (such as cardiac care, stroke, diabetes, hypertension), implementation of disease management programs, re-pricing of health care services, and options for outsourcing non-medical services. For the PBC-related sub-component, eligible project expenditures will include contributions to the health insurance funds to finance health services for the population categories exempt from payment of health insurance, as described earlier. The eligibility criteria for these contributions will be detailed in the POM.

103. **Funds flow and disbursements.** Two separate DAs will be opened by the Ministry of Finance and Treasury of Bosnia and Herzegovina: one DA for Component 1 of the project for Republika Srpska; and another one DA for Component 2 of the project for the Federation of Bosnia and Herzegovina. For Component 1 of the Project, 2 DAs will be created in the WB books to monitor flow of funds and ensure that the advance(s) paid for the regular IPF component are not used for the PBC-related sub-component. The DAs will be denominated in the currency of the loan as selected by the Borrower (EUR). For regular IPF-related categories, the disbursement methods available are direct payment, reimbursements, and advances. The funds will flow from the DA or

from the loan account directly to suppliers of works, goods, and services based on approved invoices. The disbursements methods under the PBC-related subcomponent will be advances and reimbursements. Under the PBCs, upon request of the Borrower, the Bank may advance funds to a designated account of the Borrower to finance eligible expenditures as they are incurred. Disbursements under PBCs are provisional when evidence of expenditures incurred has been provided, but the achievement of the respective PBC(s) has not been demonstrated. In these cases, a refund will be due to the Bank if the PBC is not met, even if the expenditures have been incurred. The PAFPID/PIU shall closely monitor the subsequent achievement of PBCs associated with advanced disbursements before additional advances are requested, to avoid excessive accumulation of provisionally disbursed funds. When disbursements are made after expenditures have been incurred and the associated PBC has been met, the disbursements will not be provisional or subject to refund. The amount to be disbursed will always be the lower of the eligible PBC-related project expenditures incurred, or the amounts allocated to the achieved PBCs. In case of PBC-related category and advances, the funds will flow from the WB to the DA, and from there, they will be used to pay eligible expenditures for contributions to the health insurance funds to finance health services for the population exempt from payment of health insurance through the Republika Srpska treasury. In case of reimbursements the funds will flow from the WB to the Republika Srpska treasury. Details related to disbursements will be included in the Disbursement and Financial Information Letter.

104. **The project will have the flexibility of using retroactive financing.** No withdrawals shall be made for payments made prior to the date of the Loan Agreement, except for withdrawals up to an aggregate amount not to exceed 20 percent of the total amount of the loan, which may be made for payments made for Eligible Expenditures of the project as per the Loan Agreement. The eligible period for retroactive financing will be defined in the Loan Agreement. Retroactive financing of any eligible project expenditure under category 2 is limited to the amount allocated under one or more achieved and verified PBCs.

105. **Implementation Support and Supervision Plan.** During project implementation, the WB will supervise the project's FM arrangements in two main ways: (a) review the project's IFRs, as well as the annual audited financial statements and auditor's management recommendation letters; and (b) perform on-site supervision with the frequency based on the project's assessed risk and performance (first supervision in 9 months after the assessment) and review the project's FM and disbursement arrangements to ensure compliance with the WB's minimum requirements. The on-site supervision will include a review of the following areas of the project's FM arrangements: accounting and reporting, internal control procedures and external audits, planning and budgeting, funds flow, and staffing arrangements. A sample-based transaction review will also be conducted. Implementation support and supervision will be performed by the WB-accredited Senior FM Specialist. As a result of COVID-19 pandemic, the FM supervisions may be conducted in a virtual format and will be further adjusted as a result of reviews of project risks. Further detail is provided in Annex 1.

Procurement

106. **Procurement under the project will be carried out in accordance with the WB's Procurement Regulations for IPF Borrowers** "Procurement in Investment Project Financing for Goods, Works, Non-consulting Services and Consulting Services" (July 2016, revised November 2017 and August 2018). The project will also be subject to the WB's Anti-Corruption Guidelines, dated July 1, 2016, and will be further governed by the provisions stipulated in the Loan Agreement. The project implementing agency in each entity will use the Systematic Tracking of Exchanges in Procurement (STEP) system as the planning and tracking

system, which would provide data on procurement activities, establish benchmarks, monitor delays, and measure procurement performance.

107. **Project-related procurement will be carried out by the respective implementing agencies through PIUs in each of the two entities.** In Republika Srpska, the Ministry of Health and Social Welfare will rely upon the PAFPID. PAFPID is staffed with two procurement officers, who possess some experience with WB procurement procedures that will need to be further strengthened. In the Federation, the MoH will rely upon its existing staff (who will serve as the PIU) for project implementation. If needed, MoH may hire an additional qualified procurement expert under terms of reference acceptable to the WB to support the procurement function. Relevant staff from both PIUs will be required to participate in WB procurement training sessions. In addition, WB will provide day-to-day support to the procurement teams in each entity, where needed.

108. **Project Procurement Strategies for Development (PPSDs) are currently being prepared by each implementing agency,** to outline the selection methods to be followed by the Borrowers during project implementation in the procurement of goods, works, and non-consulting and consulting services to be financed by the project. The entity-specific Procurement Plans will be updated, at least, annually or as required to reflect actual project implementation needs and improvements in institutional capacity. The PPSDs were finalized prior to loan negotiations. The identified risks and the mitigation measures are detailed in the PPSDs.

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social

109. **The project, at this stage, does not include any activities that could have a physical footprint or have direct or indirect lasting environmental and social impacts or risks**. The main aim is to improve financial management of the sector, focusing mostly on arrears. Furthermore, the project would improve quality assurance and monitoring of the services in the sector and, overall, improve quality, efficiency, and governance in the publicly funded health care sector. By increasing citizen interactions with health care facilities, the project aims to use public pressure to improve accountability and quality of health care services. Environmental gains are possible through potential support for medical waste management and disposal systems. Hospital improvement and reform plans are also likely to include activities that could have temporary environmental impacts, including minor refurbishment of health care facilities to optimize delivery of medical services, and these would be addressed by development and implementation of site-specific checklist Environmental and Social Management Plans. Provided that potential refurbishment would take place within the existing footprints of facilities, it is unlikely that impacts on private land/assets would occur. The POM would need to specify that works proposed under the improvement plans are subject to an environmental and social review and will be implemented in line with the WB Environmental and Social

Standards, as well as the Environment Health and Safety Guidelines, both general and the Guidelines for the Health Care Facilities. Environmental and Social Standards (ESS) relevant for this project are ESS1 on Assessment and Management of Environmental and Social Risks and Impacts, ESS2 on Labor and Working Conditions and ESS10 on Stakeholder Engagement and Information Disclosure.

110. **The project anticipates positive impacts on vulnerable groups in terms of maintained health care service coverage and use,** through provision of financing to the health insurance funds. In Republika Srpska, the project will monitor the government's contributions to the HIF for special categories of the population but will not directly fund the expansion of health insurance coverage of, and contribute to improved access for, these groups. The project will continue with wide and frequent stakeholder engagement and will introduce a substantive citizen engagement initiative to improve transparency and accountability in BiH's health systems, and to facilitate public receptiveness to potential changes in medical services (such as increased primary health care and day-hospital care, where appropriate).

Citizen engagement

111. **The project will build on the experience and outputs of the citizen engagement activities developed under the *Strengthening Transparency and Accountability of Health Systems in Bosnia and Herzegovina* TF** (Box 3). These activities, started during project preparation, provide a foundation for the mechanisms and capacity building needed to support the accountability and transparency aspects of health care systems reform. As noted in Box 3, the project will implement approaches developed and piloted under the citizen engagement framework agreed by both entities. This will include strategies for ensuring that: (a) social accountability action is taken on the demand (citizen) and supply (government/service provider) sides; (b) structured tools are used at critical stages of the delivery of health services in hospitals and health centers, including a digital platform and patient surveys; and (c) opportunities are created to enable civil society representatives to engage in dialogues on policy reforms. Capacity building for key actors will be needed to ensure genuine engagement and responsiveness, and to build trust in these initiatives. The project includes two beneficiary feedback indicators: the percentage of health care service users engaged in providing facility-level feedback on performance who report that their engagement was effective in planning and delivering service improvements; and the percentage of health care providers that have established and disclosed an annual, representative, patient satisfaction consistent with international benchmarks.

112. **The citizen engagement framework will include a set of actions in local communities** led by trained civil society organizations who will support health service users to understand the reform and the benefits of informed, continuous, and inclusive feedback, complementing existing health outreach approaches. This community-focused outreach will ensure that the differentiated needs and concerns of women, girls and vulnerable groups are understood, and that activities to build their voice and agency around health care are supported. Engagement will be established at two stages – first, identifying needs and determining priorities, and then monitoring performance improvements, especially by service providers. The project will use the existing institutional grievance redress mechanisms (GRMs) (with first-instance grievances handled through healthcare facilities and second instance appeals handled by the ministries) to address all citizen complaints and requests regarding the project. In addition to the existing grievance channels described above, any type of grievances or inquiries related to project activities can be submitted to the ministries through dedicated feedback channels (described in detail in the project's Stakeholder Engagement Plan).

113. **The mechanisms developed for citizen engagement will be adapted to suit the constraints of the COVID-19 context.** To maximize opportunities for health service users (patients and care takers) and civil society representatives to learn about the reform and provide feedback, the project will utilize a citizen-facing online platform (to become available by project effectiveness). This civic technology platform will promote an interactive, sustainable channel for information flows to communities and from communities on key reform issues, performance of service providers and the progress made with respect to health sector governance. It will enable the health authorities to: (a) share information on planned reforms, their costs and impacts; (b) provide a protected space for reform feedback and dialogue; (c) host digital tools as needed (such as open planning and budgeting, and the GRM); and (d) host instruments for citizen-led health services monitoring and evaluation (including regular feedback surveys). Each of these elements would contribute to a system that aims to improve transparency and use of information, and enhanced accountability and responsiveness. An indicator is included in the project results framework to measure the number of health care providers and health insurance funds engaging citizens in service design and delivery.

Climate co-benefits

114. **Climate change risks.**[35] BiH is highly vulnerable to the impacts of climate change particularly to the risk of hydrometeorological hazards including seasonal heat, flooding, and periods of drought. BiH has so far experienced temperature increases of 1.2°C in the summer months and 0.8°C in the winter. By mid-century climate change is expected to produce temperature increases exceeding historical means by 2.4°C,[36] with the number of hot days increasing by 6.3 days per year. Annual rainfall is expected to fall by 4.2 millimeters per year by mid-century[37] with the consequence that droughts will become more frequent in some areas due to river runoff decrease or drying in lowland areas compounded by increased water demand. At the same time the country is expected to experience increasingly variable precipitation patterns, with increased frequency, variability, and intensity of extreme events. Unprecedented flooding in 2014 caused over EUR 2 billion in damages and losses equivalent nearly 15 percent of GDP.[38] BiH is currently ranked third in the world in terms of vulnerability to intense rain and prolonged rainfall. Flooding, land use change, increased aridity and deforestation are also impacting land stability, particularly in BiH's central, northern and eastern zones. This is resulting in a high degree of vulnerability to, and risk from, landslides.

115. **Climate-related health vulnerabilities.** BiH's climate related exposures lead to several health risks for the population. The elderly and those with pre-existing long-term medical conditions are the most susceptible to effects of extreme heat. Extreme weather events may also adversely affect population health and the health system through acute impacts such as physical injuries and drowning, followed later by vector and waterborne diseases. In the longer-term more profound adverse health impacts are mediated through damage to health infrastructure as well as the mental health effects of traumatic experiences and the economic hardships that these events precipitate. Climate shifts are predicted to lead to increases in the range of the vector-borne diseases such as dengue fever, reaching southern Europe. Each of these climate-related health threats are expected to hit the poorest households and communities hardest, with income and

[35] Source: *Second National Communication of BiH under the United Nations Framework Convention on Climate Change;* https://unfccc.int/resource/docs/natc/bihnc2.pdf
[36] RCP8.5 scenario; this refers to the "representative concentration pathway" of carbon that delivers global warming at an average of 8.5 watts per square meter globally (translating to global heating of 4.3˚C, relative to pre-industrial temperatures, by 2100).
[37] RCP8.5 scenario
[38] https://www.worldbank.org/en/news/opinion/2018/09/17/it-is-time-for-action-on-climate-risk-in-the-balkans

health shocks driving some deeper into a poverty trap. In the absence of appropriate measures being put in place to enhance system resilience and adaptation to climate and to play an appropriate role in mitigating global climate change, the health of increasing numbers of people will be at risk. The project, in part, aims to explicitly address these climate vulnerabilities.

116. **Adaptation co-benefits.** Sub-components 1.1 and 2.1 of the project can contribute to enhancing climate resilience and adaptation through several activities. Expanded capacity for disease detection, brought about by enhancing the surveillance and contact tracing modules of the health system's current information system and associated linkage to primary health care providers, will provide climate co-benefits by enhancing detection of climate-sensitive vector-borne diseases, such as dengue, and waterborne diseases, such as salmonella and campylobacter. Support for expansion in the numbers of public health workers trained to undertake disease detection and contact tracing, including of climate sensitive health conditions, will also contribute to climate adaptation. Strengthening medical waste management will enhance the resilience and adaptive capacity of these facilities to climate-related flooding. Finally, strengthening primary health care by introducing integrated health information systems, thereby improving health-related information flows through the system, will enhance the ability of the system to detect and identify epidemiological evidence of climate-related health impacts, such as increases in morbidity and mortality from heat events, flooding or from vector-borne diseases.

117. **Mitigation co-benefits.** Sub-components 1.1 and 2.1 can also contribute to limiting the causes of climate change. Updating clinical guidelines and care pathways to strengthen preventative health care and shift management of complex, chronic conditions, such as hypertension, from hospitals to primary care will avoid unnecessary hospitalization and the high carbon footprint associated with higher tiers of health care provision.

V. GRIEVANCE REDRESS SERVICES

118. Communities and individuals who believe that they are adversely affected by a WB supported project may submit complaints to existing project-level GRM or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the WB's attention, and WB management has been given an opportunity to respond. For information on how to submit complaints to the WB's corporate Grievance Redress Service (GRS), please visit *http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service.*Information on how to submit complaints to the WB Inspection Panel can be found here: www.inspectionpanel.org.

VI. KEY RISKS

119. **The overall project risk rating is Substantial**. Risks in six of the eight categories are rated Substantial; these are political and governance; macroeconomic; sector strategies and policies; technical design; institutional capacity for implementation and sustainability; and fiduciary risks. Stakeholder risks are Moderate; environmental and social risks are Low. While a considerable degree of risk is inherent in a project of this complexity, important mitigation measures have been integrated into its design.

120. **Political and Governance risk is rated Substantial**. There is a high level of political commitment to addressing the health systems reform in both entities and at the BiH level, as evidenced by statements from both entity prime ministers and the Chairman of the Council of Ministers. Nevertheless, the complex political structure and weak mechanisms of BiH for inter-governmental cooperation pose a challenge to health systems reform. Lack of vertical coordination between federal and cantonal institutions in the Federation of Bosnia and Herzegovina represents an additional risk. Decision making is difficult within this complex structure and the project's design mitigates this risk by supporting existing entity-level responsibilities in the sector. A lack of transparency and accountability is also an enduring concern in BiH's political and governance structures. The WB will work closely and conduct widespread consultation with the various levels of government to monitor progress of implementation of the project and will insist on requirements to disclose and document the use of funding to ensure transparency during project implementation, including publication of audit results. The WB will also support the implementation of anti-corruption strategies and activities in procurement. In line with other development partners, the WB will also encourage the two entities to work together on improving health systems performance (such as coordinating procurement activities).

121. **Macroeconomic risk is rated Substantial.** BiH faces an unprecedented risk to its macroeconomic stability if the economic slowdown triggered by COVID-19 is severe and prolonged. This could be worsened if large numbers of people, fearing joblessness, decide to emigrate. Nevertheless, governments in both entities are in a relatively good fiscal position (compared to previous years) and have acted quickly to redirect resources to maintain liquidity and economic activity. Governments in both entities are committed to provide fiscal resources to core COVID-19 programs and maintain essential health service delivery. The project will reduce this risk by helping improve health systems efficiency and performance. Despite these efforts, entity governments' resources may not be enough to satisfy the critical needs in case of a prolonged crisis and further budget reallocation and external resources may be required to meet spending needs.

122. **Sector Strategies and Policies risk is rated Substantial.** Governments in each entity have adopted, or are in the process of adopting, plans and legislative frameworks to improve health systems performance that are aligned with WB recommendations and supported by other development partners. These are currently better developed in Republika Srpska, compared to the Federation of Bosnia and Herzegovina. To mitigate the risk of weak sector strategies and policies in the Federation of Bosnia and Herzegovina, the WB continues to work closely with the relevant authorities to ensure that well-defined and relevant sectoral priorities have been articulated and, if necessary, formally adopted prior to project effectiveness.

123. **Technical design risk is rated Substantial.** This is particularly due to the introduction of PBCs, an approach that has not yet been implemented in health sector projects in BiH or in the Western Balkans more widely.

Four projects from other sectors are implementing PBCs in BiH,[39] however, and experience thus far has been positive – there have been no major difficulties with fulfilment of conditions, verification, or disbursement. The need to coordinate among a number of stakeholders across all levels is also a technical design risk, albeit an unavoidable one. To mitigate these risks, the project will provide support for strengthening capacity for policy development and implementation. Regular communication and adequate tracking of project expenditures linked to PBCs by Republika Srpska will also be required.

124. **Institutional capacity for implementation and sustainability risk is rated Substantial.** Institutional and implementation arrangements are complex for this project, as is the case for all operations in BiH. Institutional arrangements in the Federation of Bosnia and Herzegovina are of particular concern because of the need for Federation authorities to liaise effectively with cantonal counterparts. These risks are increased given the variable political will and capacities of federal and cantonal authorities to implement WB-financed projects. Much of the design of the project was also undertaken virtually, rather than in person, due to the COVID-19 pandemic, limiting the depth of consultation with key institutions responsible for project implementation. The Federation of Bosnia and Herzegovina has, however, successfully implemented WB-financed projects in the past and key individuals from earlier PIUs remain employees of the FMoH (and/or other ministries). Limitations in human resource capacity and finances are also present in Republika Srpska. In each entity, these risks will be mitigated by using existing PIUs/departments with experienced staff, where possible (such as PAFPID in Republika Srpska), and by hiring additional technical and fiduciary experts to support project implementation, as needed.

125. **Overall fiduciary risk is rated Substantial.** FM risk is rated substantial. Some of the mitigation measures will include ensuring that project staff with adequate financial management expertise are in place, preparation of the FM sections for the POM, and regular project reporting and auditing, whereby some actions are expected to be met before loan signing. After the application of the FM risk mitigation measures, the risk remains **Substantial**. Procurement risk is also rated substantial. To mitigate the risks identified earlier, the PIU/PAFPID may be supported by individual consultants, as necessary, who will provide technical and fiduciary (Procurement and FM) support for procurement of information technology goods, selection of consultants' services, and contracts' management. While training and incremental operating costs will be financed under the project, financing of major civil works is not expected. After the application of the risk mitigation measures, procurement risk remains **Substantial**.

[39] The *BiH Firm Recovery and Support Project* (P174604; approved December 11, 2020); *the Employment Support Program* (P152347; approved January 5, 2017); the *Banking Sector Strengthening Project* (P158387; approved April 28, 2017); and the *Republika Srpska Railways Restructuring Project* (P161122; approved December 7, 2017).

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Bosnia and Herzegovina

Health Systems Improvement Project

Project Development Objectives(s)

The Project Development Objective is to contribute to improvement in the quality of care and in the financial sustainability of the health care systems in Republika Srpska and the Federation of Bosnia and Herzegovina.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	End Target
Contribute to improvement in the quality of care in BiH's health care systems			
The percentage of health care providers demonstrating quality gains through a defined set of indicators that are publicly disclosed (Percentage)		0.00	90.00
... in Republika Srpska (Percentage)		0.00	90.00
... in Federation of Bosnia and Herzegovina (Percentage)		0.00	90.00
Contribute to improvement in quality of care and financial sustainability in BiH's health systems			
The percentage reduction in the rate of hospital admissions where the only recorded diagnosis is arterial hypertension, or where the principal diagnosis is uncomplicated arterial hypertension (Text)	PBC 1	to be defined within the first year of the project	20% reduction from baseline
... in Republika Srpska (Text)		to be defined within the first year of the project	20% reduction from baseline

Indicator Name	PBC	Baseline	End Target
... in Federation of Bosnia and Herzegovina (Text)		to be defined within the first year of the project	20% reduction from baseline
Contribute to improvement in the financial sustainability of BiH's health care systems			
The percentage of health care providers achieving a debt ratio of 0.5 or less at the end of the financial year (Percentage)		20.00	75.00
... in Republika Srpska (Percentage)		20.00	75.00
... in Federation of Bosnia and Herzegovina (Percentage)		20.00	75.00

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	End Target
Increasing health system performance in Republika Srpska			
Percentage of health care providers that have established and disclosed an annual, representative patient satisfaction survey consistent with international benchmarks (Percentage)		0.00	90.00
Percentage of health care service users engaged in providing facility-level feedback on performance who report that their engagement was effective in planning and delivering service improvements (Percentage)		0.00	70.00
Number of clinicians and health care managers trained in health care quality monitoring and improvement techniques (Number)		0.00	250.00
Number of studies conducted to allow concentration of specialist health care into fewer providers (Number)		0.00	6.00
Percentage of hospitals publishing waiting times for selected secondary health care services (Percentage)		0.00	95.00
The gap between the percentage of hypertensive men and the		13.00	5.00

Indicator Name	PBC	Baseline	End Target
percentage of hypertensive women whose hypertension is adequately controlled, as defined by current clinical guidelines (Percentage)			
Number of health care providers or health insurance funds submitting financial reports, including overdue unpaid liabilities, to the appropriate authorities on time (Percentage)		0.00	95.00
Number of studies of patient pathways conducted to determine true cost and adjust reimbursement tariff (Number)		0.00	4.00
Transfers from the general government budget to the health insurance fund for the purposes of paying health care insurance for special categories of the population, '000 000 BAM (Number)		106.50	106.50
Increasing health systems performance in the Federation of Bosnia and Herzegovina			
Percentage of health care providers that have established and disclosed an annual, representative patient satisfaction survey consistent with international benchmarks (Percentage)		0.00	90.00
Percentage of health care service users engaged in providing facility-level feedback on performance who report that their engagement was effective in planning and delivering service improvements (Percentage)		0.00	70.00
Number of clinicians and health care managers trained in health care quality monitoring and improvement techniques (Number)		0.00	500.00
Number of studies conducted to allow concentration of specialist health care into fewer providers (Number)		0.00	6.00
Percentage of hospitals publishing waiting times for selected secondary health care services (Percentage)		0.00	95.00
The gap between the percentage of hypertensive men and the percentage of hypertensive women whose hypertension is adequately controlled, as defined by current clinical guidelines (Percentage)		13.00	5.00
Number of health care providers or health insurance funds submitting financial reports, including overdue unpaid liabilities,		0.00	95.00

Indicator Name	PBC	Baseline	End Target
to the appropriate authorities on time (Percentage)			
Number of studies of patient pathways conducted to determine true cost and adjust reimbursement tariff (Number)		0.00	4.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
The percentage of health care providers demonstrating quality gains through a defined set of indicators that are publicly disclosed	This indicator measures increases in the quality of health care services in both Republika Srpska and Federation of BiH. Health care quality indicators that are already defined and measured by ASKVA and AKAZ will be used, i.e. a parallel system will not be created. Baseline is set as zero since the indicator measures improvements in health care quality.	Yearly	ASKVA / AKAZ (and / or MoHSW/ FMoH administrative data)	ASKVA / AKAZ regular data collections	ASKVA / AKAZ; MoHSW/ PAFPID and FMoH/ PIU
... in Republika Srpska	This indicator measures increases in the quality of	Yearly	ASKVA (and / or MoHSW	ASKVA regular data collections	ASKVA ; MoHSW/

	health care services in both Republika Srpska. Health care quality indicators that are already defined and measured by ASKVA will be used, i.e. a parallel system will not be created. Baseline is set as zero since the indicator measures improvements in health care quality.		administrative data)		PAFPID
... in Federation of Bosnia and Herzegovina	This indicator measures increases in the quality of health care services in the Federation of BiH. Health care quality indicators that are already defined and measured by AKAZ will be used, i.e. a parallel system will not be created. Baseline is set as zero since the indicator measures improvements in health care quality.	Yearly	AKAZ (and / or FMoH administrative data)	AKAZ regular data collections	AKAZ; and FMoH/ PIU
The percentage reduction in the rate of hospital admissions where the only recorded diagnosis is arterial hypertension, or where the principal	Uncomplicated arterial hypertension is chosen because it is, in a high-performing health system,	Yearly	ASKVA / AKAZ (and / or MoHSW/ FMoH	ASKVA / AKAZ regular data collections	ASKVA / AKAZ; MoHSW/ PAFPID and FMoH/ PIU

diagnosis is uncomplicated arterial hypertension	almost always treatable in primary care and almost never a valid reason for hospital admission. This indicator therefore measures quality and efficiency of the health care network, ensuring more management by primary care and avoiding unnecessary hospitalization, in both Republika Srpska and Federation of BiH. Attention to this indicator should also improve the accuracy of clinical coding upon a patient's admission or discharge (and thereby improve understanding of hospital activity and ensure correct reimbursement). The value is the number of admissions per 100 000 population.		administrative data)		
... in Republika Srpska	Uncomplicated arterial hypertension is chosen because it is, in a high-performing health system, almost always treatable in primary care and almost never a valid reason for hospital admission. This	Yearly	MoHSW administrative data	MoHSW regular data collections The value is the number of admissions per 100 000 population.	MoHSW / PAFPID

	indicator therefore measures quality and efficiency of the health care network, ensuring more management by primary care and avoiding unnecessary hospitalization, in Republika Srpska. Attention to this indicator should also improve the accuracy of clinical coding upon a patient's admission or discharge (and thereby improve understanding of hospital activity and ensure correct reimbursement through the DRG system).				
... in Federation of Bosnia and Herzegovina	Uncomplicated arterial hypertension is chosen because it is, in a high-performing health system, almost always treatable in primary care and almost never a valid reason for hospital admission. This indicator therefore measures quality and efficiency of the health care network, ensuring more management by primary care and avoiding unnecessary hospitalization,	Yearly	ZZJZ FBiH (and / or FMoH administrative data)	ZZJZ FBiH regular data collections	ZZJZ FBiH and FMoH/ PIU

	in the Federation of BiH. Attention to this indicator should also improve the accuracy of clinical coding upon a patient's admission or discharge (and thereby improve understanding of hospital activity as a precursor to introduction of a DRG system).				
The percentage of health care providers achieving a debt ratio of 0.5 or less at the end of the financial year	Debt ratio = total debt / total assets. This indicator measures the effectiveness of financial management within health care facilities in both Republika Srpska and Federation of BiH. It captures longer term financial stability (by including assets) and can also reflect progress in reducing arrears (a subset of liabilities). It is well-established internationally as a measure of financial health. Baseline value will be confirmed during the first months of the project.	Yearly	MoHSW/ FMoH administrative data; and administrative data reported to the health insurance funds	MoHSW/ PAFPID and FMoH/ PIU monitoring reports	MoHSW/ PAFPID and FMoH/ PIU

... in Republika Srpska	This indicator measures the effectiveness of financial management within health care facilities in Republika Srpska. It captures longer term financial stability (by including assets) and can also reflect progress in reducing arrears (a subset of liabilities). It is well-established internationally as a measure of financial health. Baseline value will be confirmed during the first months of the project.	Yearly	MoHSW administrative data	MoHSW/ PAFPID monitoring reports	MoHSW/ PAFPID
... in Federation of Bosnia and Herzegovina	This indicator measures the effectiveness of financial management within health care facilities in the Federation of BiH. It captures longer term financial stability (by including assets) and can also reflect progress in reducing arrears (a subset of liabilities). It is well-established internationally	Yearly	FMoH administrative data	FMoH/ PIU monitoring reports	FMoH/ PIU

	as a measure of financial health. Baseline value will be confirmed during the first months of the project.				

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Percentage of health care providers that have established and disclosed an annual, representative patient satisfaction survey consistent with international benchmarks	This indicator tracks stronger health systems governance, through ensuring measurement by health care providers of satisfaction among service users.	Six monthly	Health care providers	Survey of health care providers	PAFPID
Percentage of health care service users engaged in providing facility-level feedback on performance who report that their engagement was effective in planning and delivering service improvements	This indicator tracks stronger health systems governance, through measuring citizen engagement in monitoring service performance, as well as in planning improvements in local health care services.	Yearly	Users of publicly-funded health care services who have been engaged in providing facility-level feedback on performance	Survey of users of publicly-funded health care services who have been engaged in providing facility-level feedback on performance	PAFPID and/or ASKVA

Number of clinicians and health care managers trained in health care quality monitoring and improvement techniques	This indicator tracks strengthened health systems governance, through enhanced clinical and managerial capacity to monitor and improve the quality and outcomes of care	SIx monthly	Health care providers	Survey of health care providers	PAFPID
Number of studies conducted to allow concentration of specialist health care into fewer providers	This indicator measures progress in identifying specific services or patient pathways where quality and efficiency could be improved if they were provided by fewer, specialist providers	Yearly	Health insurance fund/MoHSW	Survey of health insurance fund/MoHSW	PAFPID
Percentage of hospitals publishing waiting times for selected secondary health care services	This indicator tracks accessibility of health care services, to help ensure that efforts to control health systems spending do not compromise access to care. The indicator also promotes transparency in health systems governance.	Six monthly.	Health care providers	Survey of health care providers. The specific secondary care services whose waiting times will be monitored will be agreed with counterparts during the first six months of the project, and documented in the POM.	PAFPID
The gap between the percentage of hypertensive men and the percentage of hypertensive women whose hypertension is adequately controlled, as defined by	This indicator reflects the effectiveness of the detection and treatment of hypertension in primary	Yearly, or as often as a representa	Citizens participating in a standardized	Sex-disaggregated standardized health survey measuring, amongst other	Institute of Public Health and/or ASKVA

current clinical guidelines	care, and directly supports achievement of PDO Indicator 2. It also tracks an important gender gap: hypertensive men are less aware, less treated, and less controlled than hypertensive women. Adverse health risks that lead to elevated blood pressure, such as smoking, unhealthy diet and excessive alcohol consumption are related to social norms (and not biological differences), and are, therefore, gender issues. The baseline value, 13%, is the difference between 22.2% of hypertensive women who have safe blood pressure, and 9% of men of hypertensive men who have safe blood pressure. Self-evidently, a decrease in the rate of control of hypertension in women to meet that of men will not	tive sample can be obtained for a standardized health survey	health survey	things, a) prevalence of hypertension; b) awareness of diagnosis; c) treatment; d) adequate control of hypertension, as defined by currently applicable clinical guidelines.	

	count as success for this indicator. Rather, a levelling-up in the rate of control across both genders is expected.				
Number of health care providers or health insurance funds submitting financial reports, including overdue unpaid liabilities, to the appropriate authorities on time	This indicator monitors the capacity to provide sufficiently detailed financial reports, including data on overdue unpaid liabilities (arrears) that is currently not collected.	Every six months.	Health care providers and health insurance fund accounts	Routine administrative data	Health care providers and health insurance fund
Number of studies of patient pathways conducted to determine true cost and adjust reimbursement tariff	This indicator measures progress in assessing the true cost of care and ensuring that health care providers are appropriately reimbursed for providing these services	Yearly	Survey of health insurance fund and/or ASKVA	Survey of health insurance fund and/or ASKVA	PAFPID
Transfers from the general government budget to the health insurance fund for the purposes of paying health care insurance for special categories of the population, '000 000 BAM	This indicator measures transfers made from the government regular budget to the health insurance fund, and from the health insurance fund and to health care providers, to maintain health insurance, and coverage of the health care needs, of: war veterans, refugees, the unemployed, social welfare recipients and other	Yearly	MoHSW, MoF and the health insurance fund's administrative data	MoHSW, MoF and the health insurance fund's monitoring reports	PAFPID

	categories, as defined in Article 10(a) of the Law on Health Insurance published in Official Gazette No. 18/99. It is a means to monitor continuity and equity of access to the health care systems as efficiency reforms are undertaken. Baseline value is maintained as the target value throughout the project cycle.				
Percentage of health care providers that have established and disclosed an annual, representative patient satisfaction survey consistent with international benchmarks	This indicator tracks stronger health systems governance, through ensuring measurement by health care providers of satisfaction among service users.	Six monthly	Health care providers	Survey of health care providers	PIU
Percentage of health care service users engaged in providing facility-level feedback on performance who report that their engagement was effective in planning and delivering service improvements	This indicator tracks stronger health systems governance, through measuring citizen engagement in monitoring service performance, as well as in planning the design and delivery of local health care services.	Yearly	Users of publicly-funded health care services who have been engaged in providing facility-level	Survey of users of publicly-funded health care services who have been engaged in providing facility-level feedback on performance	PIU and/or AKAZ

			feedback on performance		
Number of clinicians and health care managers trained in health care quality monitoring and improvement techniques	This indicator tracks strengthened health systems governance, through enhanced clinical and managerial capacity to monitor and improve the quality and outcomes of care	Six monthly	Health care providers	Survey of health care providers	PIU
Number of studies conducted to allow concentration of specialist health care into fewer providers	This indicator measures progress in identifying specific services or patient pathways where quality and efficiency could be improved if they were provided by fewer, specialist providers	Yearly	Health insurance funds/MoH	Survey of health insurance fund/MoH	PIU
Percentage of hospitals publishing waiting times for selected secondary health care services	This indicator tracks accessibility of health care services, to help ensure that efforts to control health systems spending do not compromise access to care. The indicator also promotes transparency in health systems governance.	Six monthly.	Health care providers	Survey of health care providers. The specific secondary care services whose waiting times will be monitored will be agreed with counterparts during the first six months of the project and documented in the POM.	PIU

The gap between the percentage of hypertensive men and the percentage of hypertensive women whose hypertension is adequately controlled, as defined by current clinical guidelines	This indicator reflects the effectiveness of the detection and treatment of hypertension in primary care, and directly supports achievement of PDO Indicator 2. It also tracks an important gender gap: hypertensive men are less aware, less treated, and less controlled than hypertensive women. Adverse health risks that lead to elevated blood pressure, such as smoking, unhealthy diet and excessive alcohol consumption are related to social norms (and not biological differences), and are, therefore, gender issues. The baseline value, 13%, is the difference between 22.2% of hypertensive women who have safe blood pressure, and 9% of men of hypertensive men who have safe blood pressure.	Yearly, or as often as a representative sample can be obtained for a standardized health survey	Citizens participating in a standardized health survey	Sex-disaggregated standardized health survey measuring, amongst other things, a) prevalence of hypertension; b) awareness of diagnosis; c) treatment; d) adequate control of hypertension, as defined by currently applicable clinical guidelines.	Federal Institute of Public Health and/or AKAZ

	Self-evidently, a decrease in the rate of control of hypertension in women to meet that of men will not count as success for this indicator. Rather, a levelling-up in the rate of control across both genders is expected.				
Number of health care providers or health insurance funds submitting financial reports, including overdue unpaid liabilities, to the appropriate authorities on time	This indicator monitors the capacity to provide sufficiently detailed financial reports, including data on overdue unpaid liabilities (arrears) that is currently not collected.	Every six months.	Health care providers and health insurance funds' accounts	Routine administrative data	PIU
Number of studies of patient pathways conducted to determine true cost and adjust reimbursement tariff	This indicator measures progress in assessing the true cost of care and ensuring that health care providers are appropriately reimbursed for providing these services	Yearly	Health insurance funds and/or AKAZ	Survey of health insurance fund and/or AKAZ	PIU

Performance-Based Conditions Matrix				
PBC 1	The percentage reduction in the rate of hospital admissions where the only recorded diagnosis is arterial hypertension, or where the principal diagnosis is uncomplicated arterial hypertension			
Type of PBC	**Scalability**	**Unit of Measure**	**Total Allocated Amount (USD)**	**As % of Total Financing Amount**
Outcome	Yes	Percentage	10,000,000.00	13.34
Period	**Value**		**Allocated Amount (USD)**	**Formula**
Baseline	0.00			
Year 1	5.00		2,500,000.00	Disbursement amount is USD 0.5 million or every 1% reduction from baseline admission rate, up to a maximum of USD 10 million.
Year 2	10.00		2,500,000.00	as before
Year 3	20.00		5,000,000.00	as before
Year 4	20.00		0.00	as before
Year 5	20.00		0.00	as before
PBC 2	Introduction of updated hospital reimbursement methods for four patient groups, based on evidence-based care pathways			
Type of PBC	**Scalability**	**Unit of Measure**	**Total Allocated Amount (USD)**	**As % of Total Financing Amount**
Output	No	Text	8,000,000.00	10.67
Period	**Value**		**Allocated Amount (USD)**	**Formula**
Baseline	Identify appropriate pathways of care for the			

	four patient groups, as set forth in the Project Operational Manual.		
Year 1	Cost the revised pathway for care for the four patient groups in five hospitals and identify funding sources if needed, as set forth in the Project Operational Manual.	4,000,000.00	n/a
Year 2	(no condition set for this year)	0.00	n/a
Year 3	Issue regulation on revised reimbursement for revised pathways of care for the four patient groups, and start reimbursing hospitals the revised amount, as set forth in the Project Operational Manual.	4,000,000.00	n/a
Year 4	(no condition set for this year)	0.00	n/a
Year 5	(no condition set for this year)	0.00	n/a

PBC 3	Completion of all technical and policy pre-requisites for transfer of primary health care providers to the treasury system, with actual transfer of 5 primary care centers achieved			
Type of PBC	**Scalability**	**Unit of Measure**	**Total Allocated Amount (USD)**	**As % of Total Financing Amount**
Intermediate Outcome	Yes	Text	11,000,000.00	14.67
Period	**Value**		**Allocated Amount (USD)**	**Formula**
Baseline	Budget codes created for all primary care centers			
Year 1	1.an inventory of all arrears (to public authorities and to suppliers) for all primary care providers; 2. adoption by the Government of the decision on		6,000,000.00	USD 1.5 million for each of the four steps

	the first five (5) primary care centers to be transferred, and completion all necessary training in these primary care centers; 3. adoption by the HIF's Management Board of decision to implement the Integrated Health Information System (IZIS), including automated exchange of clinical data (in order to accurately determine health care providers' activity, costs and reimbursement); 4. transfer to the chart of accounts used by public institutions within the treasury system.		
Year 2	Transfer of the first five (5) primary care centers to the treasury system achieved	5,000,000.00	USD 1 million for each primary care center transferred
Year 3	(no condition set for this year)	0.00	n/a
Year 4	(no condition set for this year)	0.00	n/a
Year 5	(no condition set for this year)	0.00	n/a

PBC 4	Increase in the percentage of health care providers using patient satisfaction measures and service-user engagement in business planning, including publicly disclosed patient satisfaction rates.			
Type of PBC	**Scalability**	**Unit of Measure**	**Total Allocated Amount (USD)**	**As % of Total Financing Amount**
Outcome	Yes	Text	8,000,000.00	10.67
Period	**Value**		**Allocated Amount (USD)**	**Formula**
Baseline	Citizen Feedback Mechanisms (CFM) methodology and digital platform developed			
Year 1	10% of facilities implementing CFM and publicly		2,000,000.00	Disbursement amount is USD 0.84

	reporting action taken through annual reports		million for every 1% reduction from baseline admission rate, up to a maximum of USD 8 million.
Year 2	50% of facilities implementing CFM and publicly reporting action taken through annual reports	3,000,000.00	as before
Year 3	(no condition set for this year)	0.00	n/a
Year 4	90% of facilities implementing CFM and publicly reporting action taken through annual reports	3,000,000.00	as before
Year 5	(no condition set for this year)	0.00	n/a

Verification Protocol Table: Performance-Based Conditions	
PBC 1	The percentage reduction in the rate of hospital admissions where the only recorded diagnosis is arterial hypertension, or where the principal diagnosis is uncomplicated arterial hypertension
Description	Uncomplicated arterial hypertension is chosen because it is, in a high-performing health system, almost always treatable in primary care and almost never a valid reason for hospital admission. This indicator therefore measures quality and efficiency of the health care network, ensuring more management by primary care and avoiding unnecessary hospitalization, in both Republika Srpska and Federation of BiH. Attention to this indicator should also improve the accuracy of clinical coding upon a patient's admission or discharge (and thereby improve understanding of hospital activity and ensure correct reimbursement). The value is the number of admissions per 100 000 population.
Data source/ Agency	MoHSW and Health Insurance Fund annual statistics
Verification Entity	to be decided in the first months of the project
Procedure	Submission of routine administrative data

PBC 2	Introduction of updated hospital reimbursement methods for four patient groups, based on evidence-based care pathways
Description	This PBC will support modernization of how the health insurance fund contracts and pays for selected episodes of hospital care incentivizing both quality and financial sustainability. The four patient groups will be selected from those patient groups that currently incur the greatest expenditure in hospital care, identified through the DRG payment system. The five hospitals wlll be selected from those that currently incur the greatest expenditure for these four patient groups. Evidence for Year 1 will comprise a database of the real costs of care for the four selected patient groups in the five selected hospitals, summarized and analysed to allow revision of the DRG tariff to more accurately reflect the true cost of care. Evidence for Year 3 will comprise regulation that authorizes and requires use of the revised DRG tariff to reimburse hospitals for these patients.
Data source/ Agency	Health insurance fund
Verification Entity	to be decided in the first months of the project
Procedure	Review of DRG tariiffs, reimbursement regulations and contracts between health insurance fund and selected hospitals
PBC 3	Completion of all technical and policy pre-requisites for transfer of primary health care providers to the treasury system, with actual transfer of 5 primary care centers achieved
Description	This PBC reflects one of the key priorities of the government of Republika Srpska, namely transfer of health care providers and the health insurance fund to the government's main budget planning, monitoring and execution system. USAID have previously provided TA that specifies the technical and policy pre-requisites to enable this. Protocols for the harmonization and automated exchange of clinical and financial data will need to be agreed between health care providers, the health insurance fund and MoHSW to accurately determine providers' activity, costs and reimbursement.
Data source/ Agency	Ministry of Finance
Verification Entity	to be decided in the first months of the project
Procedure	Consultation with MoHSW, HIF and health care providers

PBC 4	Increase in the percentage of health care providers using patient satisfaction measures and service-user engagement in business planning, including publicly disclosed patient satisfaction rates.
Description	This indicator assesses the maturity of governance of the health care network, through greater responsiveness and accountability to health service users, in Republika Srpska
Data source/ Agency	ASKVA (and / or MoHSW administrative data)
Verification Entity	to be decided in the first months of the project
Procedure	Survey of health care providers

ANNEX 1: Implementation arrangements and support plan

1. **In Republika Srpska, the MoHSW, as an overarching authority in the health sector, will be responsible for implementation and oversight of the proposed Project**. The MoHSW will develop, steer, coordinate, implement, and monitor Project activities. Other institutions involved in the Project implementation will include the HIF, the Public Health Institute (PHI), the Agency for Certification, Accreditation and Health Care Quality Improvement (ASKVA), and MoF. When the Project's implementation starts, the Planning, Analysis, Financing and Project Implementation Department (PAFPID), headed by the Assistant Minister, will have a key role in providing all functions specific to the day-to-day implementation of the project, including, but not limited to, overall coordination, as well as arrangements for FM, disbursements, and procurement. The PAFPID will have the reporting and monitoring responsibility in relation to the WB in collaboration with all agencies involved in the project. The PAFPID has experience with implementation of various WB-financed projects and has been mainstreamed within the structure of the MoHSW for several years and is, therefore, expected to take over project implementation responsibility.

2. **In the Federation of Bosnia and Herzegovina, as in the case for Republika Srpska, the project will be managed by the MoH**. The project will use the existing capacity of the MoH to ensure day-to-day management of the project, including ensuring adequate human resources to coordinate the technical content of project implementation at the federal and cantonal levels. The MoH will formally appoint members of the PIU, headed by the Assistant Minister, who will be responsible for all fiduciary tasks of procurement and FM, as well as for the monitoring and reporting on the implementation of project activities. The MoH of the Federation will, through the PIU, have specific role of the overall oversight, coordination, and support to implementation of all activities agreed with cantons, who will be the beneficiaries of this project. The project invisages directly supporting three cantons, namely: Sarajevo Canton, Herzegovina-Neretva Canton and Tuzla Canton.

3. **In both entities, detailed project implementation procedures will be compiled in a Project Operations Manual (POM)**. This will be agreed upon in draft form prior to project effectiveness and adopted by the MoHSW in Republika Srpska and MoH in the Federation of Bosnia and Herzegovina within one month of project effectiveness. An independent financial audit will be conducted annually. The goal would be to ensure that all financial information is reported accurately. Results from the independent audit would be provided to the MoHSW in Republika Srpska and MoH in the Federation of Bosnia and Herzegovina for their review and acceptance. Both MoHSW and MoH will provide WB with a formal letter advising of staff appointed to perform various functions during the project implementation, including description of responsibilities within one month of project effectiveness.

Results monitoring and evaluation

4. **Project monitoring and evaluation will be carried out by PAFPID in Republika Srpska and the PIU in the Federation of Bosnia and Herzegovina.** The assigned Monitoring and Evaluation Specialists in each entity will have responsibility to collect and/or coordinate collection of all data that verifies achievement of results, from all implementing agencies, and to communicate these results to the WB based on the frequency of reports specified in the POM. To the extent possible, project indicators will be tracked and disaggregated by gender and vulnerable groups.

5. **The monitoring and evaluation capacity of the respective entities and other relevant agencies will be developed to allow more effective sector management going forward**. The monitoring data would be periodically reviewed by the implementing agencies and MoF to assess the likelihood of achieving the PDO and to take timely corrective measures, as needed. The project monitoring and evaluation data would also be used by the implementing agencies and MoF in analytical reports on the progress and impact of health sector reforms.

6. **Data collection and analysis strategies would rely on the Republika Srpska and Federation of Bosnia and Herzegovina statistics system, where possible.** Complementary additional data collection instruments will be developed to fill the gaps, where necessary. Data would be collected at entity and sub-entity levels. To the extent possible, progress on results will be monitored using existing mechanisms and routine data sources, such as those available from the health systems' information systems, administrative records of the ministries of health, HIFs, and cantonal authorities. Emphasis on user feedback will be strengthened. The PDO-level and intermediate results indicators would be monitored using the following data collection instruments:

a) Regular surveys and data collection processes;
b) Administrative data currently available in the health sector and the integrated e-Health to be strengthened under the proposed project; and
c) Monitoring reports prepared by the PAFPID and PIU.

7. **Frequency of Reporting.** Data on most project indicators will be reported on a semi-annual basis. Quarterly progress reports will be prepared by the PAFPID and PIU and will include data on grievances and resolution to allow for timely corrective action. Evaluation of project implementation will be carried out semi-annually, in addition to the mid-term review and assessment of project implementation prior to its closing.

Financial management

8. **Planning and budgeting.** Adequate planning arrangements are in place through the PAFPID/PIU. Actual versus planned data comparison done as required, with any variances explained. The annual plans are based on detailed procurement planning. Existing FM staff in the PAFPID/PIU have adequate capacity for planning and budgeting in terms of human resources, availability of quality information and IT system. The PAFPID/PIU prepare budgets for all project components, which are entered in the accounting software, with actual versus planned information analyzed and explained. Budgeting and accounting functions in both PAFPID and PIU are appropriate.

9. **Accounting policies and procedures.** The PAFPID/PIU have an acceptable project accounting software for project implementation arrangements, for which a license needs to be extended. The software has the necessary features to produce the required reports and maintain a trail of transactions in verifiable manner. The PAFPID and PIU will maintain project accounts and will ensure appropriate accounting of the loan proceeds. Additional accounting policies applied to the project adhere to the following principles: (a) cash accounting as the basis for recording transactions; (b) reporting in the currency of the loan; and (c) preparation of quarterly IFRs.

10. **Staffing.** The PAFPID/PIU have fully functional accounting and finance teams. Both PAFIIPD and PIU have prior experience in implementing several WB-funded projects (Health Sector Enhancement Project and its additional financing, Reducing Health Risk Factors, and others). Both units have each one person in charge of financial management. Additional individuals will be hired to deal with an increased workload, if assessed as necessary during project implementation.

11. **Financial Management Manual (FMM).** The FMM for the Bosnia and Herzegovina Emergency COVID-19 Project (P173809) can be adapted and updated to reflect any changes in the financial management arrangements

in relation to the proposed project. The manuals contain details about the applicable accounting procedures, internal key controls performed (i.e., reconciliations, authorizing procedures), budgeting, fixed assets records, details pertaining to the accounting software (i.e., back up procedures, restricted access, transaction recording). The FMMs are regularly updated, as necessary.

12. **Back up.** In the PAFPID/PIU back-up of project accounting data is done on a regular (either weekly or daily). Data is saved on servers and external memory. On a quarterly basis, data is also stored in the federal Ministry of Finance database called the Public Investment Management System.

13. **Internal Controls and Internal Audit.** The PAFPID and PIU will maintain adequate internal controls for the project, including regular reconciliation of bank accounts, adequate segregation of duties, proper accounting policies and procedures, and monthly reconciliation of disbursement summaries with accounting records will be performed. Designated Accounts reconciliation statements, Client Connection figures will be reconciled monthly with the accounting records. IFRs would be reconciled on a regular basis with the accounting data. The IFRs will also be reconciled on a regular basis with the trial balance out of which they are prepared, including relevant bank statements. Evidence of the reconciliation made will be kept in project records. The PAFPID and PIU will maintain, print, and store all back up documentation (trial balance, bank statements, journal entries, etc.) for the quarterly IFRs in a file. Further details on the internal controls will be contained in the FM manuals. Internal audit departments exist in both MoHSW and FMoH; both, however, are at an early stage of development and, thus, no reliance on their work would be placed.

14. **FM Reporting and Monitoring Arrangements.** The PAFPID and PIU shall prepare and furnish to the WB, not later than 45 days after the end of each calendar quarter, IFRs for the project covering the quarter, in form and substance satisfactory to the WB. The IFRs will include sections on Sources and Uses of Funds, Uses of Funds by Project Activity, Statement of Financial Position, DA Reconciliation Statement, SOE Withdrawal Schedule and reports on project expenditures linked to PBCs. The formats of the IFRs have been agreed and confirmed.

15. **External Audit.** The PAFPID and PIU will be responsible for timely compilation of annual project financial statements for independent external audit. Project financial statements (including SOE and DA activities) will be audited by an independent auditor acceptable to the WB and contracted by the Ministry of Finance and Treasury of BiH. Each audit of financial statements will cover one fiscal year of the Borrower, commencing with the fiscal year in which the first withdrawal is made under the loan. In Republika Srpska, the project financial audit will also include an independent audit of the project expenditures linked to PBCs, which shall certify the extent to which these expenditures for the pertinent calendar year were eligible.

16. **In addition, the auditors are expected to deliver management recommendation letters in relation to the project, identifying any internal control deficiencies and accounting issues.** The audit reports, audited financial statements, and management recommendation letters will be delivered to the WB within six months after the end of each fiscal year. The audited project financial statements will be made publicly available in a timely fashion, and in a manner acceptable to the WB. There are no overdue reports for WB-financed projects for the year ended December 31, 2020.

17. **Eligible project expenditures linked to the PBCs will comprise the MoHSW's direct transfers to the HIF for the purposes of paying health care insurance for special categories of the population, as defined in Article 10(a) of the Law on Health Insurance published in Official Gazette No. 18/99.** These transfers are substantial and, therefore, support functioning of the health system as a whole, including those functions addressed by the four PBCs. Project expenditures in this sub-component, therefore, directly contribute to achievement of the PDO. They also offer a means to monitor continuity and equity in access to health care. The eligibility criteria for the transfers will be detailed in the POM.

18. **Arrangements for project expenditures.** In Republika Srpska, implementation of the PBC-based sub-component will rely on architecture for the eligible expenditures for the MoHSW's direct transfers to the HIF for the purposes of paying health care insurance for special categories of the population, as defined in Article 10(a) of the Law on Health Insurance published in Official Gazette No. 18/99. Based on semi-annual SOEs prepared by the PAFPID, the WB will reimburse the Republika Srpska MoF for a share of project expenditures after specified PBCs have been fulfilled and verified, net of any advances previously provided. Amounts disbursed by the WB will be included in Republika Srpska's regular budget and expensed in accordance with the entity policies and procedures. More precisely, the project expenditures linked to PBCs are specified as follows.

Table 1.1: Source of project expenditures linked to PBCs

Agency/Institutions	Account code
Republika Srpska	
MoHSW Transfers to HIF for the purposes of paying health care insurance for special categories of the population.	487400

19. **As for the direct transfers of MoHSW to the HIF, the Ministry will maintain its formal program for such transfers.** The transfers to HIF are subject to regular audit by the Republika Srpska Office for Audit (which is the supreme audit institution in Republika Srpska).

20. **Disbursements and Flow of Funds**. Two DAs shall be opened by the BiH MoFT. The DA A will be opened for Republika Srpska-implemented components, for which the loan financing amounts have been allocated to categories 1 and 2 (for category 2 only if advances are used) of the table of eligible expenditures (ref. Schedule 2, Section II.A to the Loan Agreement); and DA B will be opened for Federation of Bosnia and Herzegovina-implemented components for which the loan proceeds are allocated to category 3. For Component 1 of the project, 2 DAs will be created in the WB books to monitor and ensure that the advances paid for the regular IPF component are not used for the PBC sub-component. Such accounts will be opened in a commercial bank acceptable to the WB. The ceiling for the designated accounts will be defined in the Disbursement and Financial Information Letter.

21. **To support implementation of activities under all components, the following flow of funds and disbursement methods will be used:**

a) For regular IPF-related categories (1 and 3), the disbursement methods will include direct payment, reimbursements, and advances. The funds will flow from the DA or from the WB directly to the suppliers for payments related to eligible expenditures of the project.

b) The disbursements methods under the PBC-related category will include advances and reimbursements. Under the PBC-related category (category 2), the Bank may advance funds to the designated account of the Borrower to finance eligible expenditures as they are incurred. Disbursements under PBCs are provisional when evidence of expenditures incurred has been provided, but achievement of the respective PBC has not been demonstrated. In these cases, a refund will be due to the Bank if the respective PBC is not met, even if the expenditures have been incurred. The PAFPID/PIU shall closely monitor the subsequent achievement of PBCs associated with advanced disbursements before additional advances are requested, to avoid excessive accumulation of provisionally disbursed funds. When disbursements are made after expenditures have been incurred and the associated PBC has been met, they will not be provisional or subject to refund. For category 2, the funds will flow from the WB to the DA in the form of provisional advances and, from the DA,

they will be paid to Republika Srpska treasury for the payment of eligible expenditures (namely contributions to the HIF to finance the insurance premiums of special categories of the population). For reimbursements, the funds will flow from the WB to the Republika Srpska treasury account.

Details related to disbursements will be included in the Disbursement and Financial Information Letter.

22. **Partial achievement and overachievement of PBCs**. The arrangements for partial achievement and overachievement of PBCs are as follows:

- Disbursements withheld due to non-achievement of a PBC in a given period may be released in subsequent periods once the PBC is achieved.
- Disbursements withheld due to insufficient project expenditures will be released in subsequent periods once remaining project expenditures have been incurred.
- Partial achievement of a PBC (where applicable) may result in a partial disbursement on a pro rata basis (see further detail in the Verification Protocol Table).
- Disbursements for any PBC will be capped at the amount allocated to that PBC, i.e., overachievement of a PBC will not result in any additional payments.

23. **Financial Management action plan, conditions, and covenants.** The PAFPID and PIU will continue to maintain a project financial management system acceptable to the WB. The project financial statements will be audited by independent auditors acceptable to the WB and on terms of reference acceptable to the WB. The annual audited statements and audit report will be provided to the WB within six months of the end of each fiscal year. Quarterly IFRs will be forwarded to the WB no later than 45 days after the end of each quarter. An FM action plan with dated actions and dated covenants is presented in Table 1.2 below:

Table 1.2: Financial Management Actions, Deadlines and Responsibilities within the project

Action	Deadline	Responsibility
(a) Formally assigning FM staff.	30 days after effectiveness	PAFPID and PIU
(b) updating FM sections of the POM for the FBiH PIU.	30 days after effectiveness	PAFPID and PIU
(c) Renewal of the project accounting software license for the new project.	30 days after effectiveness	PAFPID and PIU

24. **Use of country systems.** Some elements of country systems such as project FM staffing will be used for this project. Other elements of country systems will be assessed for application in this project as they become available or relevant.

25. **Contract management.** PAFPID and PIU will manage a technical and financial database established for all project contracts. The technical database will be updated by procurement staff on a regular basis. This database will have all information on contracts, amendments, as well as payments made. The FM managers have an oversight over the payments and can easily control and prevent any overpayments.

26. **Supervision Plan.** As part of its implementation support, the WB will conduct risk-based financial management supervisions, at appropriate intervals, in the following ways: (a) review the project's quarterly financial reports, the project's annual audited financial statements, the auditor's management letter and remedial

actions, if any; and (b) during the WB's on-site supervision missions, review the following key areas: (i) project accounting and internal control systems; (ii) budgeting and financial planning arrangements; (iii) disbursement management and financial flows, including counterpart funds, as applicable; and (iv) any incidences of corrupt practices involving project resources.

Procurement Arrangements

Procurement of Works

27. **Works eligible under the project will be procured under open procedure,** both National and International, using procedures and methods (Request for Bids) specified in more detail in the Procurement Plan, depending on their estimated cost value. The thresholds for prior review and procurement methods are set forth in the PPSDs. Request for Quotations may be used for procurement of works under USD 100,000.

Procurement of Consulting Services

28. **Selection of consulting firms will be done using the WB standard procurement documents, such as Request for Proposals.** The employment of an individual expert will be conducted through the selection of independent contractors in accordance with the Procurement Regulations. In case the service is required from a consultancy firm, the Quality- and Cost-based Selection method will be applied; other methods such as Least-Cost Selection, Fixed Budget Selection, or Quality-Based Selection may also be used following provisions of Procurement Regulations. For contracts below USD 300,000 equivalent, the Selection Based on Consultants' Qualification method may be used.

Procurement of Goods and Non-Consulting Services

29. **Goods will be procured under open procedure**, both National and International, using procedures and methods (Request for Bids, Request for Quotations) specified in more detail in the Procurement Plan.

General Procurement Notice

30. **The General Procurement Notice will be prepared and submitted to the WB before effectiveness.** The WB will arrange for its publication in United Nations Development Business online and on the WB's external website. The General Procurement Notice will contain information concerning the Borrower, amount, and purpose of the loan; scope of procurement reflecting the Procurement Plan; the name, telephone (or fax) number, and address(es) of the Borrower's agencies responsible for procurement; and the address of a widely used electronic portal with free national and international access or website where the subsequent Specific Procurement Notices will be posted. The General Procurement Notice will be published tentatively in mid-2022 providing information on the scope of major procurements for the project and soliciting expressions of interest from prospective bidders and/or consultants for this project.

Procurement Plan

31. **The entities will develop their respective initial Procurement Plans for the entire project consistent with the implementation plan**, which will provide information on the procurement of packages, potential selection processes with methods to be used, and the WB review requirements. Since these will cover the entire project implementation period, the initial Procurement Plan will be tentative. However, Procurement Plans per entity for

12 months of the project should be prepared in more detail. The Procurement Plans will be updated in agreement with the WB task team, at least, annually or as required to reflect actual project implementation needs and improvements in the implementing agencies' institutional capacity. The recommended template of Procurement Plans for the project is given in Table 3 below.

Procurement Supervision

32. **Routine procurement reviews and supervision will be conducted by the WB Accredited Procurement Specialist**. In addition, one supervision visit is expected to take place per year when ex-post reviews will be conducted. Procurement documents will be kept readily available for WB's ex-post reviews during supervision missions or at any other point in time. A post-review report will be prepared annually and shared with the implementing agencies.

Table 1.3: Template table for potential procurement packages within the project

Item	Description	Type		Cost Estimate (US$)	Selection Method	Review	Planned Date (Tender Launch)	Implementing Agency
Component 1: xxx								
1.1 xx								

ANNEX 2: Costs and Financing of the Project in US Dollars

Program Components	Project Cost (USD m)	IBRD Financing (USD m)	Trust Funds	Counterpart Funding
Component 1. Increasing health system performance in Republika Srpska	**53.42**	**53.42**		
• Goods, equipment and minor works; consulting and non-consulting services	13	13		
• Promoting linked institutional and policy reforms through performance-based conditions	37	37		
• Project management in Republika Srpska	3.42	3.42		
Component 2. Increasing health systems performance in the Federation of Bosnia and Herzegovina	**21.40**	**21.40**		
• Goods, equipment and minor works; consulting and non-consulting services	20	20		
• Project management in the Federation of Bosnia and Herzegovina	1.40	1.40		
Total Costs				
Front End Fee (0.25%)	0.18	0.18		
Total Financing Required	**75.0**	**75.0**		

ANNEX 3: Technical Appraisal

1. **This Annex reviews and analyzes the efficiency of health financing and health spending in BiH, also focusing on the occurrence and handling of arrears in health facilities and will provide specific recommendations to address the issues identified.** Where data are available, the Annex provides separate analyses for the two large entities, the Federation of Bosnia and Herzegovina and Republika Srpska, as they manage separate health care systems.

2. **Four countries have been chosen as comparators for BiH: Croatia, Hungary, Slovenia and Serbia.** While all are (to a varying extent) more economically developed than BiH, and all but Serbia are EU member states, they were selected due to geographic vicinity, common history including recent economic and ongoing demographic transition, cultural ties, and Bosnia and Herzegovina's EU membership aspirations.

3. **BiH does not collect and publish a number of health care statistics, complicating international comparisons that could point to health system issues requiring improvements.** Data on unmet health needs due to cost, waiting time, or distance; detailed elaboration of out-of-pocket payments; hospital and primary health care quality indicators; information on inpatient versus outpatient and day procedures in hospitals; and data on expenditures on medicines were not available in international or local databases.

Overview of population health care needs

4. **Health outcomes in BiH do not stand out from those recorded in Croatia, Serbia, and Hungary, but they lag substantially behind Slovenia's.** Life expectancy at 77 years was, in 2018, slightly lower than in Croatia (78) and lower than in Slovenia (81), but higher than in Serbia and Hungary (76).[40] Similarly, age standardized death rates (0-64 years of age) for malignant neoplasms, diseases of the circulatory system, ischemic heart disease and cerebrovascular disease either do not surpass or compare favorably to all regional countries but Slovenia which records the best health results.

Table 3.1: Age-standardized death rates 0-64, per 100,000 population

	Malignant neoplasms	Diseases of the circulatory system	Ischemic heart disease	Cerebrovascular disease	Last year available
Croatia	84,11	53,34	27,21	11,32	2016
Hungary	109,77	86,3	41,46	14,75	2016
Slovenia	72,17	28	16,05	5,55	2015
Bosnia and Herzegovina	74,68	69,96	24	11,96	2014
Serbia	99,79	82,04	23,99	16,96	2015

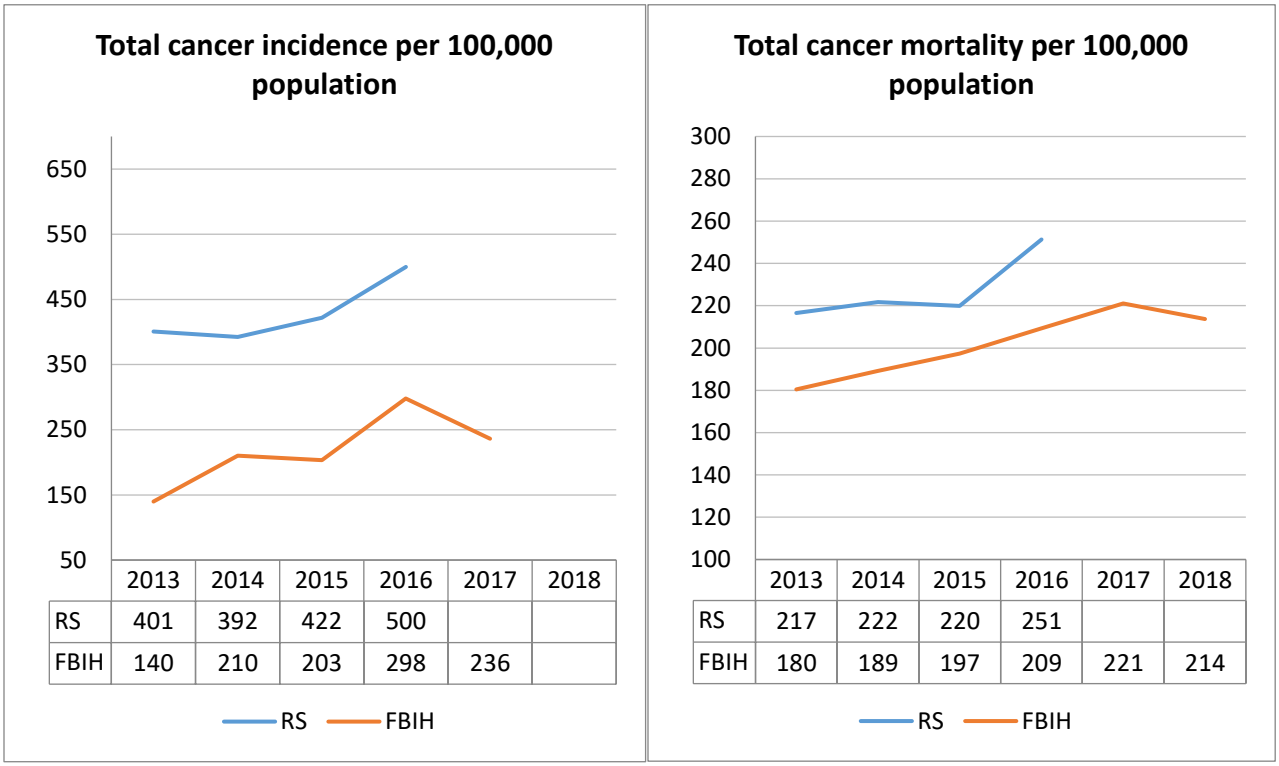
Source: HFA 2020

5. **The main public health challenge in BiH is the high burden of NCDs: heart disease, stroke, cancer, diabetes, and chronic respiratory disease.** NCDs are estimated to account for 80 percent of the country's annual deaths and addressing them is the foremost public health priority in the country. They dominate the overall burden of

[40] World Development Indicators, available at *https://databank.worldbank.org/source/world-development-indicators*

disease and disability, as do the risk factors that contribute to them, such as high blood pressure, tobacco use, and unhealthy nutrition.[41] Total cancer incidence per 100,000 population has been growing; from 2013 to 2017, it increased from 140 to 236 in the Federation of Bosnia and Herzegovina and from 401 to 500 (in 2016) in Republika Srpska.[42] Cancer mortality has been on the increase as well.

Figure 3.1: Cancer incidence and mortality in Bosnia and Herzegovina



6. **Available indicators suggest that the health systems in BiH could considerably improve the way in which they respond to the health needs of the population.** Of the four comparator countries, only Serbia recorded a worse Healthcare Access and Quality Index[43] in 2015 (78.2), while the infant mortality rate (5 per 1,000 births) and the total cancer mortality to incidence ratio in BiH were in 2018 highest in the region.[44] An additional indicator of the health care systems' inability to effectively diagnose and treat cancer may be the disproportion between the comparatively low risk of developing cancer before the age of 75 and dying from it, as reported by Globocan.

[41] World Health Organization Regional Office for Europe. Tackling noncommunicable diseases in Bosnia and Herzegovina. Copenhagen, 2018
[42] Health Statistics Annual, Federation of Bosnia and Herzegovina and Statistical Yearbook, Republika Srpska Institute of Statistics.
[43] Measured on a scale from 0 (worst) to 100 (best) based on death rates from 32 causes of death that could be avoided by timely and effective medical care (also known as 'amenable mortality').
[44] World Development Indicators, available at *https://databank.worldbank.org/source/world-development-indicators*

Table 3.2: Cancer statistics in BiH and comparator countries

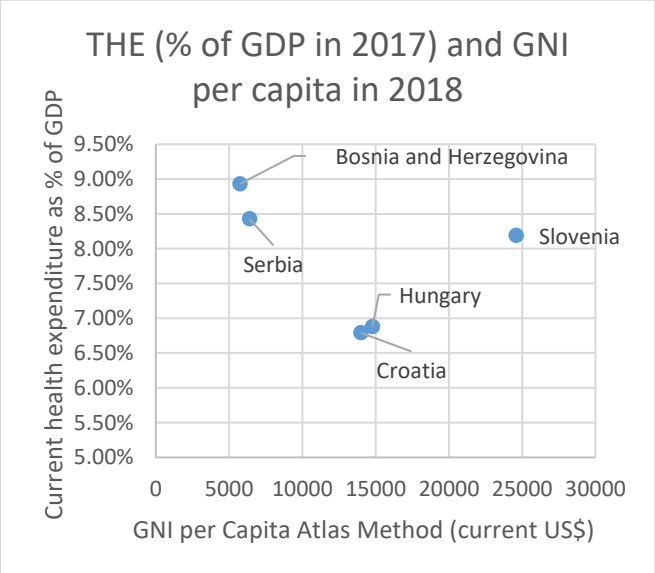
	Risk of developing cancer before age 75 in 2018	Risk of dying from cancer before age 75 in 2018	Total cancer mortality to incidence ratio[45] in 2018
Slovenia	30.3%	12.3%	47.4%
BiH	23.6%	12.6%	62.7%
Croatia	28.2%	14.0%	57.3%
Serbia	30.9%	16.6%	56.1%
Hungary	35.1%	16.9%	46.9%

Source: Globocan 2018 (total cancer mortality to incidence ratios calculated based on Globocan data)

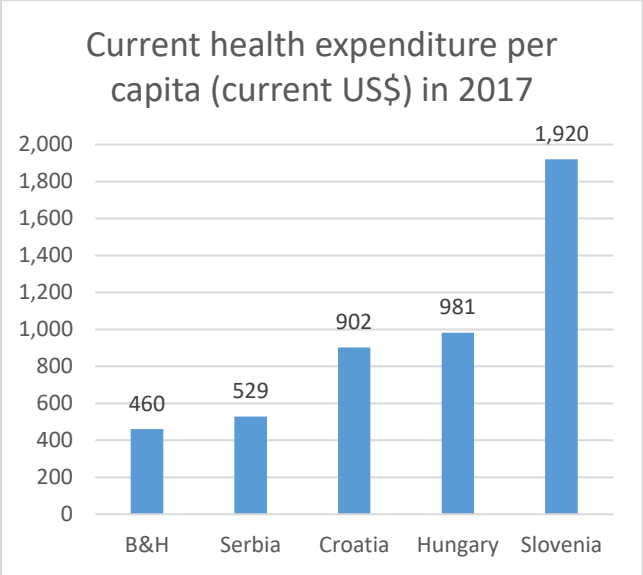
Overview of health financing

7. **Total health expenditure per capita in BiH is the lowest in the region, even though relative to its GDP the country invests in health much more than other neighboring countries.** Expenditure on health as percentage of GDP reached 8.93 percent in 2017, but due to lagging economic development this translates into a modest USD 460 per capita. In 2018, Republika Srpska spent more than the Federation of Bosnia and Hercegovina, both in absolute (BAM 961 vs. 818 per capita) and in relative (11.2 vs. 8.17 percent of GDP) terms.

Figure 3.2: Absolute and relative health expenditure

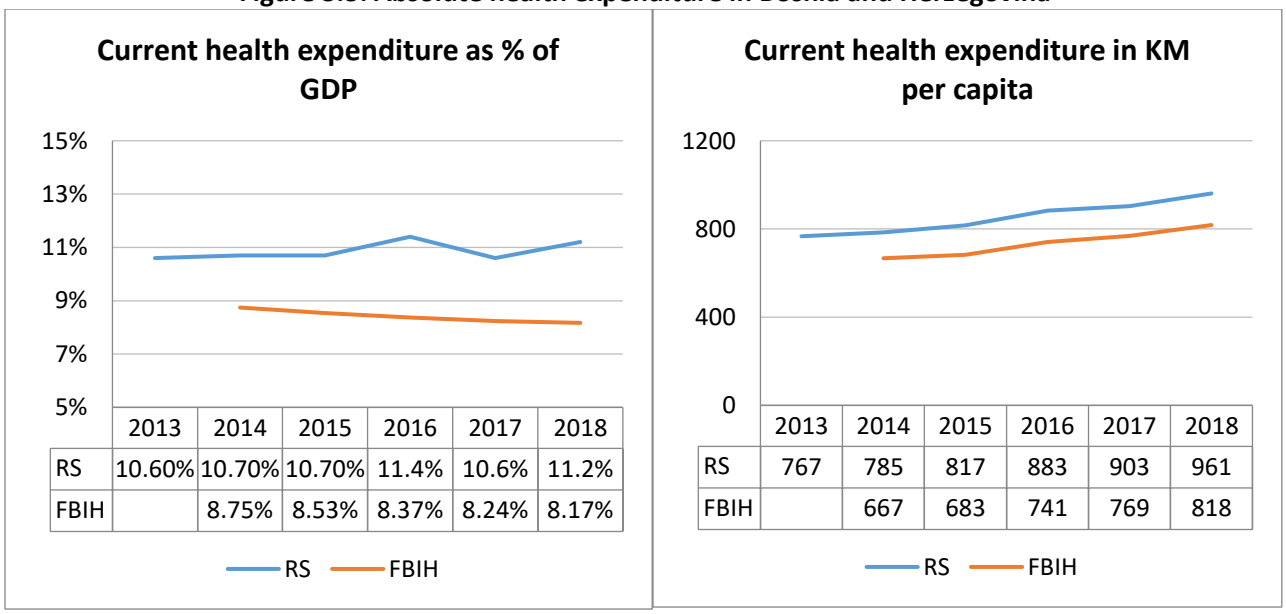


[45] The mortality-to-incidence ratio (MIR) is generally used as a high-level comparative measure to identify inequities in cancer outcomes. MIR is a cruder survival estimate than relative survival. However due to its simplicity (calculated by dividing the mortality count by the incidence count in a given year), it allows international comparisons of survival due to the availability of high-quality incidence and mortality data for most countries.



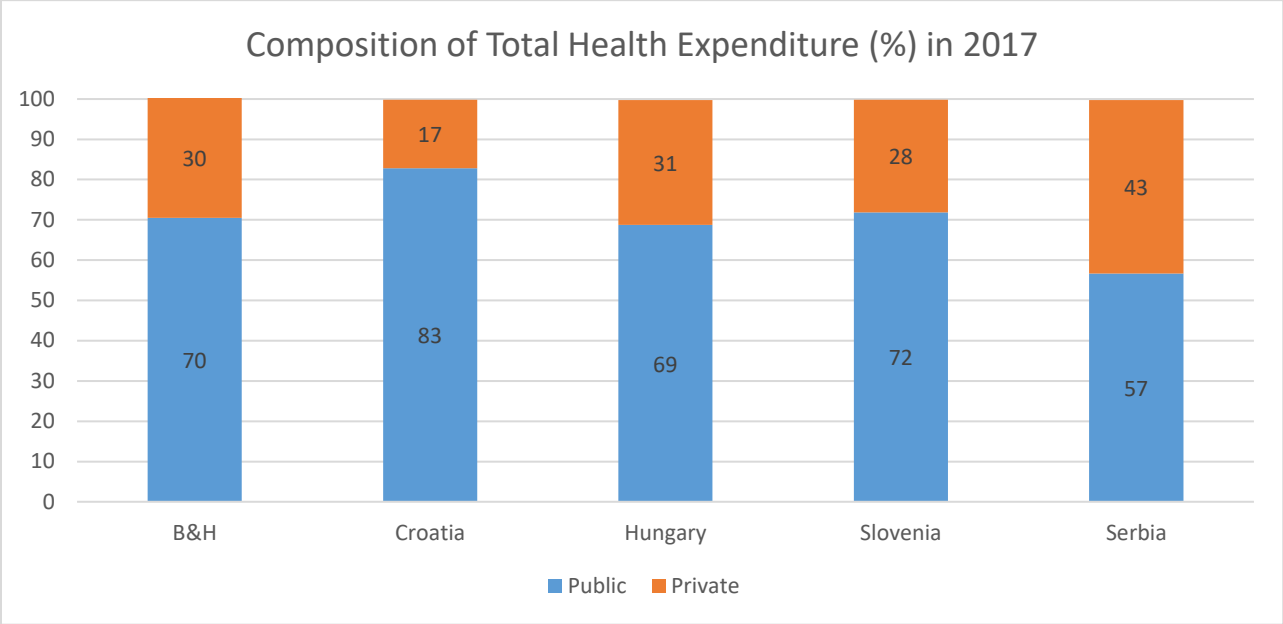
Source: WDI 2020

Figure 3.3: Absolute health expenditure in Bosnia and Herzegovina



8. **The distribution of public and private expenditure on health is comparable to Slovenia and Hungary, while in Croatia citizens cover a smaller and in Serbia a larger share of the total out-of-pocket spending.** Public health expenditure accounted for 70 percent of total health expenditure in the country and both large entities in 2018. The distribution between public and private health expenditure has been very stable in the 2014 to 2018 period.

Figure 3.4: Public and private health expenditure



Source: WDI 2020

9. **Out-of-pocket expenditures are driven largely by spending on medicines and medical devices.** In BiH (data not available by entities), outpatient medicines and medical devices in 2018 were predominantly financed through out-of-pocket payments (60 percent of total expenditure). The share of private financing in the total was also high for rehabilitation services (40 percent), while other cost categories were less exposed to out-of-pocket payments. For instance, the entire cost of long-term care and 80 percent of the total cost of curative care and ancillary services (laboratory, diagnostic imaging, patient transport, emergency services, etc.) was paid publicly.[46]

Efficiency of health spending

10. **In primary care, BiH has (over two decades ago) introduced the family medicine model in which all insured need to register with a family medicine team (doctor and one or two nurses), but the two entities have diverged in pacing provider payment and other reforms.** Republika Srpska has privatized a small share of teams and has introduced capitation payments, supplemented with penalties for overprescribing, excessive referral, and sick leave rates. Provision of services in the Federation of Bosnia and Herzegovina has remained fully public and primary care centers are financed through line-item budgets. No entity provides financial incentives for provision of preventive care, increased productivity, quality improvements (e.g., through adherence to clinical guidelines or pathways), or improved patient health outcomes. Both entities have made progress in establishing electronic patient records which enable health care quality agencies to monitor the quality of provided services and to engage in benchmarking of family medicine teams based on performance in key health outcomes (such as management of hypertension).

11. **Workload in primary health care has increased in both entities from 2013 to 2018, but it remains unclear to what extent general practitioners and family medicine specialists truly act as gatekeepers to hospitals and**

[46] National Health Account Statistics for 2018, Demography and Social Statistics. Agency for statistics of Bosnia and Herzegovina. Sarajevo, July 2020.

resolve all appropriate health issues at the level of primary care. In the Federation of Bosnia and Herzegovina, house visits have been on a decrease and around 27 percent of all doctor consultations result in referrals (compared to, for example, 16 percent in Croatia in 2014);[47] this percentage has not changed in the five-year period. In Republika Srpska, there has been a sharp increase of doctor visits, and house visits have also been on a rise. Preventive check-ups have increased but are still, relative to population, far behind the Federation of Bosnia and Herzegovina. No data on referrals is available for Republika Srpska.[48]

Table 3.3: Family and general medicine primary care workload

Federation of Bosnia and Herzegovina	**2013**	**2018**
Systematic and preventive check-ups per 100,000 population	796	851
Counselling per 100,000 population	19,123	19,770
Doctor visits per 100,000 population	308,618	339,674
House (doctor) visits per 100,000 population	1,319	1,085
Referrals to specialists per 100,000 population	1,550	1,63
Referrals to specialists/ doctor visits	28%	27%
Republika Srpska		
Systematic and preventive check-ups per 100,000 population	364	544
Doctor visits per 100,000 population	301,217	389,493
House (doctor) visits per 100,000 population	1,613	1,917

Source: Health Statistics Annual - Federation of Bosnia and Herzegovina and Statistical Yearbook- Republika Srpska Institute of Statistics; 2019

12. **An additional argument potentially pointing to the need to further strengthen primary health care in Republika Srpska (no data is available for the Federation of Bosnia and Herzegovina) could be high and increasing levels of admissions for conditions that could be treated outside of hospitals.** These include diabetes, hypertension, pneumonia, chronic obstructive pulmonary disease, asthma, etc. Hospitals in East Sarajevo, Trebinje and Foca particularly stand out in this respect, relative to the populations that they serve, possibly pointing to the need to strengthen the primary care network in these territories and/or suggesting that that patient admission practice in these hospitals needs revisiting.

13. **BiH has made little progress in reforming its hospital sector; both entities have largely retained (and increased) infrastructure inherited from former Yugoslavia and hospitals have yet to adopt new technologies and management practices that would substantially improve productivity and efficiency of service provision.** Options for rationalization and modernization of the hospital networks have been considered on a number of occasions, but with modest progress. The hospital sector continues to suffer from inefficient distribution of infrastructure and equipment, as well as outdated management and clinical practice.

14. **While the Federation of Bosnia and Herzegovina still relies on line-item budgets to finance hospitals,[49] Republika Srpska introduced DRG payments in 2012, which have enabled some efficiency gains in service**

[47] Luka Vončina, Aneesa Arur, Fedor Dorčić, and Dubravka Pezelj-Duliba. Universal Health Coverage in Croatia: Reforms to Revitalize Primary Health Care. The World Bank, Washington, DC, 2018

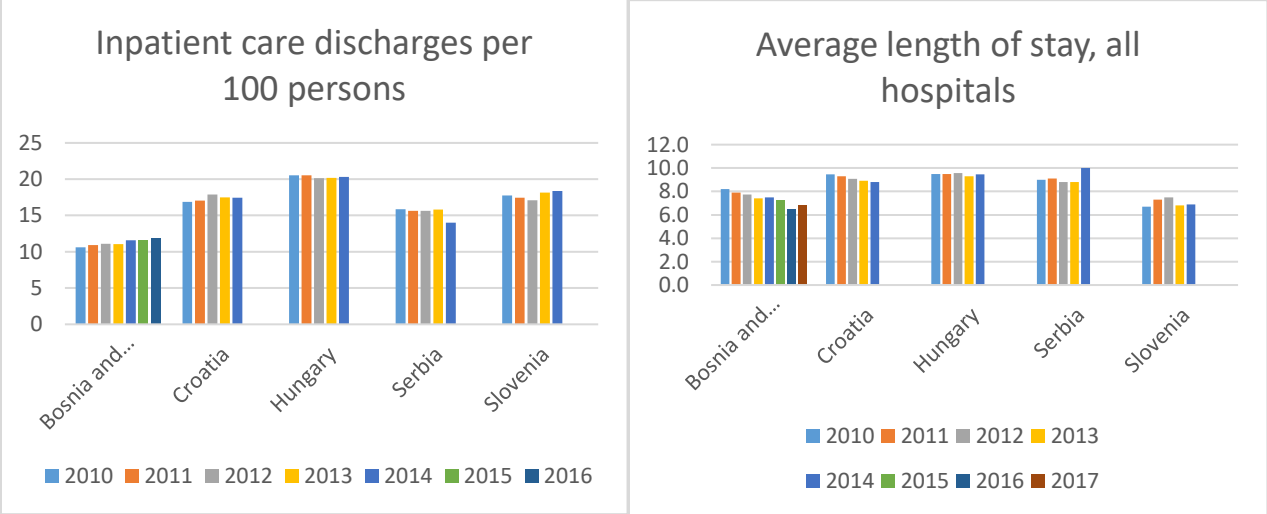
[48] Population estimates have influenced all these indicators in Republika Srpska. In 2015 the population was estimated at 1.4 million and in 2016 at 1.1.

[49] Introduction of DRGs is in an early phase of implementation.

provision but require further refinement. Invoicing control needs to be better developed as there are indications that hospitals game the DRG system through upcoding and miscoding invoices. Finally, as the Republika Srpska HIF also contracts private hospitals, some may be engaged in cherry-picking, that is, offering only lucrative care and leaving the public system to manage more complex and less favorably reimbursed patients. Neither entity has made progress in using financial incentives towards hospital quality improvement.

15. T**he Federation of Bosnia and Herzegovina records lowest hospital inpatient discharges in the region, far below other countries and Republika Srpska; bed occupancy rates and the average length of stay (ALOS) are also very low and have been further decreasing.** Still, it is unclear whether these indicators are a consequence (and to what extent) of a delay in the implementation of hospital sector reforms, unmet health needs, issues with recording, or health system efficiency. In addition, the low number of discharges contradicts the high number of referrals from the primary care to hospital care level in the entity.

Figure 3.5: Inpatient discharges and average length of stay



Source: HFA 2020

16. **Hospital inpatient discharges in Republika Srpska have been on a continuous increase over the last years and are better aligned with regional comparator countries, as is the case with bed occupancy rates in the entity.** Admissions for colorectal (53 percent), breast cancer (60 percent) and diabetes (28 percent) have been on a particularly sharp rise in the 2015 to 2019 period. Average lengths of stay are even lower than they are in the Federation of Bosnia and Herzegovina. Some hospitals such as Bijeljina, Zvornik and Nevesinje report particularly low ALOS in 2019 (3.47 – 4.06 days for acute patients), perhaps pointing to the need to better control hospital coding and admission practice.

Table 3.4: Hospital inpatient care efficiency indicators in the entities

Federation of Bosnia and Herzegovina	**2013**	**2018**
ALOS all hospitals	7.9	7.0
Bed occupancy rates all hospitals	63.6%	58.9%
Inpatient care discharges per 100 population	10.29	11.16

Republika Srpska		
ALOS all hospitals	6.8	6.6
Bed occupancy rates all hospitals	71.3%	80.7%
Inpatient care discharges per 100 population[50]	12.27	18.69

Source: Health Statistics Annual - Federation of Bosnia and Herzegovina and Statistical Yearbook- Republika Srpska Institute of Statistics; 2019

17. **Contrary to inpatient discharges, the total number of outpatient consultations in Republika Srpska has declined from 2016 to 2019, suggesting that hospitals may be unnecessarily admitting patients that could be treated in an outpatient setting.** The largest hospital in Republika Srpska (UCC Banja Luka), has decreased the number of outpatient consultations in the period by 22 percent. Few hospitals (Doboj, East Sarajevo, and Zvornik), however, have increased the number of delivered outpatient consultations in line with international trends.

Table 3.5: Hospital outpatient consultations in Republika Srpska

Hospital/ Year	2016	2017	2018	2019
UCC Banja Luka	782,106	750,824	690,815	609,430
Gradiska	99,058	94,135	108,490	102,660
Prijedor	244,276	225,284	216,632	196,528
Doboj	275,822	252,881	267,985	259,445
Bijeljina	189,006	191,586	179,505	176,663
East Sarajevo	98,990	94,548	102,286	106,387
Foca	134,592	128,102	114,926	113,011
Zvornik	150,323	156,221	170,432	172,393
Trebinje	88,478	71,826	74,738	67,321
Nevesinje	17,351	13,506	14,004	13,868
Total	**2,080,002**	**1,978,913**	**1,939,813**	**1,817,706**

Source: data provided by the Republik Srpska MoHSW

18. **Basic hospital productivity indicators in Republika Srpska (data for the Federation of Bosnia and Herzegovina are not available) reveal large discrepancies between hospitals in the numbers of employed medical and non-medical staff versus discharged patients, pointing to potential efficiency gains in service provision in some hospitals.** The number of discharged patients varies from 30 per medical staff (doctors and nurses) in Nevesinje to 51 in Zvornik. The observation warrants further in-depth analysis due to other variables that could be influencing the indicator, such as patient complexity, the nature of clinical services provided, hospital admission practice, etc. The number of discharged patients per non-medical staff also varies widely, from 87 in Banja Luka to 155 in Gradiska. This indicator should also be further researched to take into account the effect of outsourced services, hospital infrastructure that requires maintenance, etc.

[50] Population estimates have influenced these indicators in Republika Srpska as well. In 2015 the population was estimated at 1.4 million and in 2016 at 1.1.

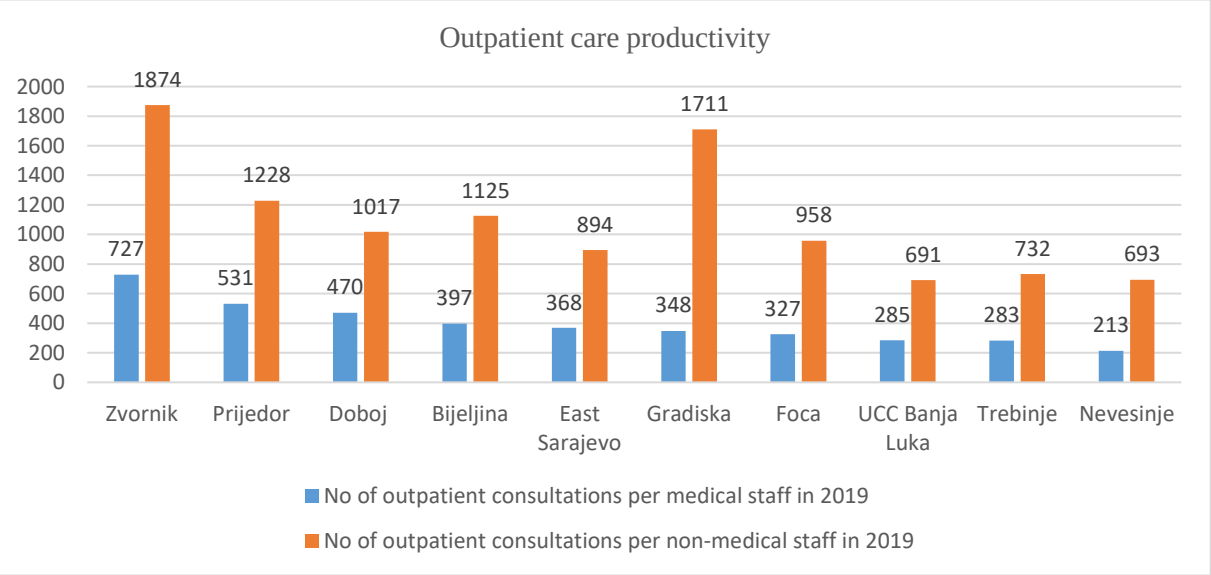
Table 3.6: Basic hospital inpatient productivity indicators

	Medical staff	Non-medical staff	Patient discharges in 2019	Discharges per medical staff in 2019	Discharges per non-medical staff in 2019
Zvornik	237	92	12,059	51	131
Prijedor	370	160	16,451	44	103
Doboj	552	255	23,997	43	94
East Sarajevo	289	119	11,855	41	100
Trebinje	238	92	8,743	37	95
UCC Banja Luka	2,142	882	76,675	36	87
Foca	346	118	12,397	36	105
Bijeljina	445	157	14,961	34	95
Gradiska	295	60	9,297	32	155
Nevesinje	65	20	1,929	30	96
Total/ average	**4,979**	**1,955**	**188,364**	**38**	**96**

Source: calculated based on data provided by the Republika Srpska MoHSW (staff in December 2019)

19. **Even greater variability between performed outpatient consultations per medical (340 percent) and non-medical (270 percent) staff by hospitals in Republika Srpska further validates the observation on potential efficiency gains in service provision.** With medical staff, as with discharges, hospitals in Zvornik, Prijedor, and Doboj appear to outperform other hospitals, and the Nevesinje hospital appears to be least productive. Hospitals in Zvornik and Gradiska stand out on the number of outpatient consultations per non-medical staff.

Figure 3.6: Outpatient consultations per medical and non-medical staff in 2019



Source: calculated based on data provided by the Republika Srpska MoHSW (staff in December 2019)

20. **Furthermore, available data from the Republika Srpska (data from the Federation are not available) indicate that there may be potential to better optimize both the network of hospitals (in terms of which hospitals provide which services) and the efficiency of service provision by relying more on day-hospital and laparoscopic procedures.** For example, the volume of hip replacements undertaken in hospitals in Prijedor, Zvornik, Doboj and East Sarajevo (all under 60 procedures annually) or knee replacements in Trebinje, Bijeljina Zvornik and Gradiska (all under 30 procedures annually) may not justify maintaining orthopedic surgery departments in all these hospitals. In addition, almost all hospitals currently appear to treat cancer, while international best practice clearly points to benefits both in the efficiency and outcomes of treatment when care is centralized in centers of excellence. Very few cataract surgeries and tonsillectomies across the Republika Srpska are performed as day cases and laparoscopic surgery is seldom used in appendectomies, repair of inguinal hernias, etc.

Table 3.7: Inpatient vs. day-hospital procedures in cataract surgery and tonsillectomy in Republika Srpska

	Cataract surgery			Tonsillectomy		
	Total	Inpatient	Day-hospital	**Total**	Inpatient	Day-hospital
2015	**3,652**	3,645	7	**1,962**	1,960	2
2016	**4,440**	4,435	5	**1,772**	1,771	1
2017	**4,195**	4,173	22	**1,683**	1,681	2
2018	**6,167**	5,811	356	**1,523**	1,521	2
2019	**6,409**	6,392	17	**1,370**	1,369	1

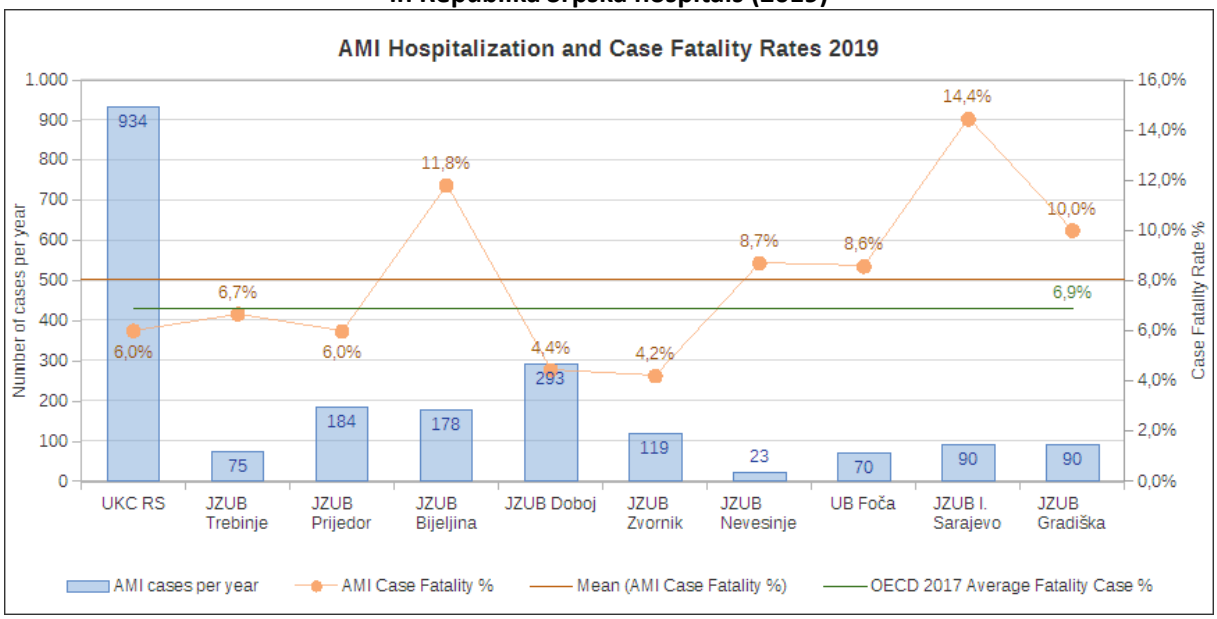
Source: data provided by Republika Srpska MoHSW

21. **Quality of care in hospitals should be better monitored and more efforts should be invested to improve quality and outcomes of care in both entities.** Surgical complications and health care-associated infections, obstetric trauma, mortality following stroke and heart attack (monitored in Republika Srpska, but not in the Federation), Oxford Hip Score, etc. are not monitored. Few data available (for the Republika Srpska only) indicate that while mortality following acute myocardial infarction at 6.85 percent of all admitted patients in 2019 (according to the Republika Srpska MoHSW) compares favorably with other countries, 30-day mortality rates for stroke (at 27 percent of all admitted patients[51]) appear as very high from an international perspective, where best countries, according to OECD,[52] record results of under 10 percent.

[51] These data are collected and analyzed by ASKVA.

[52] Health at a Glance 2019. OECD Indicators. OECD 2019. Available from: *https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-2019_4dd50c09-en*

Figure 3.7: Acute myocardial infarction hospitalization and case fatality rates in Republika Srpska hospitals (2019)



Source: data provided by the Republika Srpska MoHSW

22. **The variability among Republika Srpska hospitals in recorded outcomes of care (no data are available for the Federation of Bosnia and Herzegovina) provides additional arguments towards addressing a pressing need to focus in greater depth on quality improvement.** This is, for example, evident from the review of case fatality rates among patients with acute myocardial infarction in selected hospitals in Republika Srpska in 2019, as displayed in Figure 8. Having taken the important step of measuring quality standards and identifying variability, little effort has so far been invested in understanding why some facilities find it more difficult to adopt quality standards and achieve better outcomes and which concrete measures could be used to improve performance.

23. **Lack of coordination and integration between HIFs and providers, as well as between providers, in both entities may also be affecting health outcomes and resulting in inefficiencies in service provision.** Planning, monitoring, and evaluation are focused on individual institutions that function as separate siloes so the health systems appear very fragmented. Joint strategic planning activities are not undertaken to assess and plan for projected demand and to develop clinical pathways for integrated care that would enable health care provision to become more effective and centered on patients rather than on providers.

24. **BiH has the fewest physicians and nurses per 100,000 population in the region, but their numbers have been on an increase in recent years.** Administrative staff employed in the health sector outnumber doctors, and their number in the 2013 to 2018 period has further increased.

Table 3.8: Numbers of physicians and nurses in BiH and comparator countries

	Physicians per 100,000 population in 2014	Nurses and midwives, practicing, per 100,000 population in 2013
Bosnia and Herzegovina	(2013) 188	545
Croatia	313	658
Hungary	332	660
Serbia	307	(2012) 632
Slovenia	276	833

Source: HFA 2020

Table 3.9: Numbers of physicians, nurses, and administrative staff in BiH's health systems

		2013	2018
FBiH	Physicians per 100,000 population	198	224
	Nurses/technicians per 100,000 population	547	561
	Administrative staff (total) per 100,000 population	305	323
RS	Physicians per 100,000 population	171	225
	Nurses/technicians per 100,000 population	334	412
	Administrative staff per 100,000 population	268	341

Source: Health Statistics Annual - Federation of Bosnia and Herzegovina and Statistical Yearbook- Republika Srpska Institute of Statistics; 2019

25. S**alaries accounted for the bulk of expenditures in primary care health centers (75 percent of all costs) in 2019 and have recorded a slight increase from 2015.** Materials and services (including medicines and consumables) accounted for 14 percent and other expenses for the remaining 11 percent. This is in line with expectations as primary health care is labor intensive and medicines and devices are distributed through pharmacies and financed from a separate budget.

Table 3.10: Expenditure by categories in primary health care

	Salaries		Materials and services		Other expenses	
	2015	2019	2015	2019	2015	2019
Primary care - Health Centers	73%	75%	13%	14%	14%	11%

Source: data provided by the Republika Srpska MoHSW

26. **Costing of both inpatient and outpatient hospital services should be revisited in Republika Srpska as there are indications that the current schedule of prices contributes to unnecessary hospitalizations as well as generation of hospital arrears.** Under-pricing of outpatient services paid to hospitals, which are retrospectively annually reduced not to exceed the total HIF budget for outpatient care, could be encouraging needless hospitalizations as was earlier discussed. Prices of day-hospital treatments and DRGs may not be taking account of actual (rational) hospital expenditure either as they have not been regularly adjusted for inflation or for the increased cost of the provision of some services over time.

27. **Other aspects of hospital contracting in Republika Srpska may also be contributing to inefficiencies in the provision of care.** All inpatient services provided over financial caps assigned to all hospitals are subject to impartial arbitrage procedures. If these services (only those over the cap and not all provided services) are deemed necessary, the HIF is obliged to pay. This disproportionally distributes the risk of overprovision towards the HIF and does not incentivize managers or doctors to treat patients rationally and stay within their allocated annual allotments.

28. **Clearance of all hospital arrears through commercial bank loans and a significant increase in health staff salaries that were undertaken in 2008 have put considerable strain on hospital financing in Republika Srpska as they were not matched with adequate increases in hospital revenues.** Consecutive reductions in the rate of health insurance contributions levied on salaries from 15 in 2001 to 12 percent in 2013 and those levied on pensions (from 3.75 in 2009 to 1 percent in 2013), as well as large scale contracts with private providers for dialysis and radiotherapy services implemented in 2013 have put additional strain on overall health financing, compromising the HIF's ability to raise hospital revenues. In addition, a large-scale contract for the development and implementation of an integrated health information system was signed in 2018.

29. **Efforts invested towards improving efficiency or rationalizing hospital costs need to primarily focus on the University Clinical Hospital Center Republika Srpska as it is the largest generator of costs in the hospital network.** The Center consumes more than half (55 percent) of the entire hospital budget while nine secondary-level hospitals receive very modest funding. Nevertheless, these data (in line with data on service provision) may also be pointing towards opportunities to consolidate service provision in the network of secondary level hospitals given the paucity of funding some of them receive, depending on geographic circumstances, such as travelling times to other hospitals, which may compromise access to services.

Table 3.11 Allocation of hospital financing (BAM)

	Total hospital expenses		Share of total expenses	
	2015	2019	2015	2019
Total budget for all hospitals	**272,737,081**	**307,832,479**		
University Clinical Hospital Center Rep. Srpska	135,381,008	168,913,165	50%	55%
Total secondary level hospitals	**137,356,073**	**138,919,314**	**50%**	**45%**
Bijeljina Hospital	22,061,916	21,841,029	8%	7%
Gradiska Hospital	13,550,059	14,514,637	5%	5%
Doboj Hospital	26,251,826	29,956,870	10%	10%
Zvornik Hospital	11,142,661	10,622,636	4%	3%
East Sarajevo Hospital	16,016,428	12,654,705	6%	4%
Nevesinje Hospital	3,102,182	4,448,436	1%	1%
Prijedor Hospital	18,324,340	17,046,038	7%	6%
Trebinje Hospital	10,422,568	11,362,415	4%	4%
Foca Hospital	16,484,093	16,472,548	6%	5%

Source: data provided by the Republika Srpska MoHSW

30. **Salaries in the University Clinical Hospital Center Republika Srpska accounted for only 40 percent of all costs in 2019 (with a decreasing trend from 2015), while materials and services (including medicines and consumables) accounted for the largest (and sharply growing) part of expenditures (44 percent) pointing towards the need to examine these costs in greater detail.** Expenditure on medicines, devices and consumables needs to be controlled through efficient procurement practice and a clearly defined benefit package in terms of products and services prescribed to patients as well as the use of clinical guidelines that steer clinical practice. These costs, if not controlled, can easily spiral out of control and generate arrears.

31. **In secondary-level hospitals, salaries were the largest expenditure item (59 percent of all costs) in 2019, but with substantial variation between hospitals that may indicate overstaffing in some hospitals.** Hospitals such as Zvornik (70 percent), East Sarajevo and Foca (66 percent) record much higher shares of expenditure on salaries, possibly caused by redundant staff. While these costs are relatively small in absolute terms, compared to the entire budget for all hospitals, they may be compromising the ability of these hospitals to procure sufficient medicines and consumables to treat patients or may be contributing towards the generation of arrears.

Table 3.12: Expenditure by categories in hospitals

	Salaries		Materials and services		Other expenses	
	2015	2019	2015	2019	2015	2019
University Hospital Center Rep. Srp.	42%	40%	37%	44%	21%	17%
Total secondary level hospitals	58%	59%	22%	23%	19%	18%
Bijeljina Hospital	53%	50%	25%	27%	23%	23%
Gradiska Hospital	55%	58%	23%	23%	21%	19%
Doboj Hospital	60%	59%	19%	23%	21%	18%
Zvornik Hospital	65%	70%	25%	20%	10%	10%
East Sarajevo Hospital	55%	66%	26%	21%	19%	12%
Nevesinje Hospital	45%	41%	17%	21%	38%	38%
Prijedor Hospital	61%	57%	20%	22%	19%	20%
Trebinje Hospital	66%	63%	21%	26%	13%	11%
Foca Hospital	60%	66%	24%	19%	16%	15%

Source: data provided by the Republika Srpska MoHSW

32. **The share of doctors and nurses who are managers (and have higher salaries) varies substantially between the 10 largest hospitals in Republika Srpska (from 8 to 18 percent), indicating some potential for restructuring of hospital departments that could result in greater efficiency and rationalization of costs.** In December 2019, the 10 largest hospitals in Republika Srpska employed a total of 4,979 medical staff and spent a total of BAM 7,157,858 on their salaries. Costly overtime accounted for, on average, a modest 6 percent of total wages with little variation between hospitals. Due to lack of data on outpatient consultations (only data on discharges has been provided), it was not possible to engage in further productivity analysis and benchmarking.

Table 3.13: Salaries in hospitals in Republika Srpska, December 2019 (BAM)

Data for December 2019	**Total salaries in December 2019**	**Medical staff salaries, including overtime, in December 2019**	**Non-medical staff salaries in December 2019**
Bijeljina	753,202	626,941	126,260
UCC Banja Luka	3,866,818	3,145,610	721,208
Doboj	997,078	772,149	224,929
Zvornik	422,025	339,225	82,801
Trebinje	409,728	332,779	76,948
Prijedor	656,021	527,380	128,641
East Sarajevo	485,045	392,321	92,725
Nevesinje	102,953	86,545	16,408
Gradiska	483,050	423,125	59,926
Foca	609,016	511,783	97,233
Total	**8,784,936**	**7,157,858**	**1,627,079**

Source: data provided by the Republika Srpska MoHSW

33. **The proportion of non-medical staff in the total number of employed and the share of non-medical managers as opposed to regular workers also vary widely between hospitals, pointing to potential overstaffing and inefficiencies.** In December 2019, the 10 largest hospitals in Republika Srpska employed a total of 1,955 non-medical staff and spent BAM 1,627,079 on their monthly salaries. Non-medical staff accounted for 17 percent of all staff employed in Gradiska and for, as much, as 32 percent in Doboj.[53] The share of non-medical managerial staff out of all non-medical workers varied from 4 percent in East Sarajevo to 12 percent in Gradiska. While efforts should be invested to rationalize the provision of non-medical services in hospitals, given low salaries (average non-medical staff's monthly salary was BAM 847), layoffs of redundant staff and reorganizing work to require less managers can be expected to result in modest savings for hospitals. For instance, if all hospitals (but Gradiska which records a lower number) were able to reduce their share of non-medical staff to that of Nevesinje (24 percent), they could collectively reduce expenditure on non-medical staff for an estimated BAM 4.3 million annually, or around 22 percent of total expenditure on their salaries.

Table 3.14: Benchmarking staff and salaries in hospitals in Republika Srpska, December 2019 (BAM)

Data for December 2019	**Non-medical staff out of total (%)**	**Average medical staff salary**	**Average non-medical staff salary**	**% of medical staff who are managers**	**% of non-medical staff who are managers**	**Overtime as % of health staff salaries**
Bijeljina	26	1,409	804	14	5	5
UCC Banja Luka	29	1,469	818	N/A	N/A	5
Doboj	32	1,399	882	8	9	6
Zvornik	28	1,431	900	15	12	5

[53] The analysis does not take into account hospital spending on outsourced non-medical services as this data was not available.

Trebinje	28	1,398	836	15	9	5
Prijedor	30	1,425	804	14	6	6
East Sarajevo	29	1,358	779	9	4	6
Nevesinje	24	1,331	820	17	5	6
Gradiska	17	1,434	999	13	12	6
Foca	25	1,479	824	18	8	7
Total/ Average	28	1,413	847	14	8	6

Source: data provided by the Republika Srpska MoHSW

ANNEX 4: Economic Appraisal

Summary:

1. **There is a strong economic rationale for investing in improvement in the quality of care and in the financial sustainability of BiH's health care systems.** The resources provided by the project will help increase sustainability and quality of and will generate efficiency gains from implementing measures for better accountability of the health systems and discontinuation of accumulation of arrears, restructuring of the hospital activities in the interest of building stronger primary care, which can help prevent avoidable hospitalizations, and shifting inpatient care to outpatient levels, when possible.

2. **A cost-benefit analysis was conducted, with a focus on comparing the monetary estimate of benefits of implementing project activities and estimating possible redistribution of the available fiscal space**. The analysis presents a model for potential gains in health status from improvement of quality of care and estimates of impact on the budget of interventions for improved purchasing of medicines, cleaning of arrears, and shifting hospital care to outpatient level by strengthening primary care and prevention of ambulatory-sensitive hospitalizations. The full cost of the project was distributed across 2022-2028. Impacts were estimated from the literature, or similar WB-financed investments, and projected for the lifetime of the project.

3. **The project will potentially generate a combined net present value of USD 49.6 million.** The benefit-cost ratio for the project's base scenario is estimated to be 4.3. The project's benefits are significant even with conservative estimates of gains in disability-adjusted life years associated with cardio-vascular diseases and suggested marginal improvements in efficiency of spending on medicines and medical products and decreasing avoidable hospitalizations.

Costs associated with the BiH health care system

4. **BiH has not shown substantial improvements in population health outcomes over recent years**. Despite belonging to the group of upper-middle income countries, and improvements in health outcomes over the past two decades, the expected life expectancy rate did not change much for the last 10 years, showing only 1 year gained over this period from 76 years in 2008 to 77 years in 2018.

5. **At 8.9 percent of GDP spent on health, the country stands out compared to its neighbors in terms of the share of finances channeled to health expenditures,** although such high GDP share translated into just nominal $460 per capita. Republika Srpska invests in health more than the Federation of Bosnia and Herzegovina (11.2 vs. 8.2 percent of GDP), but investments require efficiency improvement measures to fully translate into better services and health outcomes.

6. **Expenditures on medications and medical goods are higher than the EU average** of 17.6 percent, making 29 percent of health spending in the Federation of Bosnia and Herzegovina and 23 percent in Republika Srpska. In real terms, the spending on pharmaceuticals is almost equal in both entities at about BAM 230 (USD 130) in 2018, but in the Federation of Bosnia and Herzegovina about 56 percent of all expenditures and in Republika Srpska 66 percent were covered by patients, and not by the public budget. Accumulation of arrears includes overdue payments to suppliers of medical goods, which is one of the reasons preventing the country from spending its tight public budget to finance better access to medications. Optimization of the purchasing function and consolidation of procurement as well as the revision of prices and the reimbursement mechanisms should

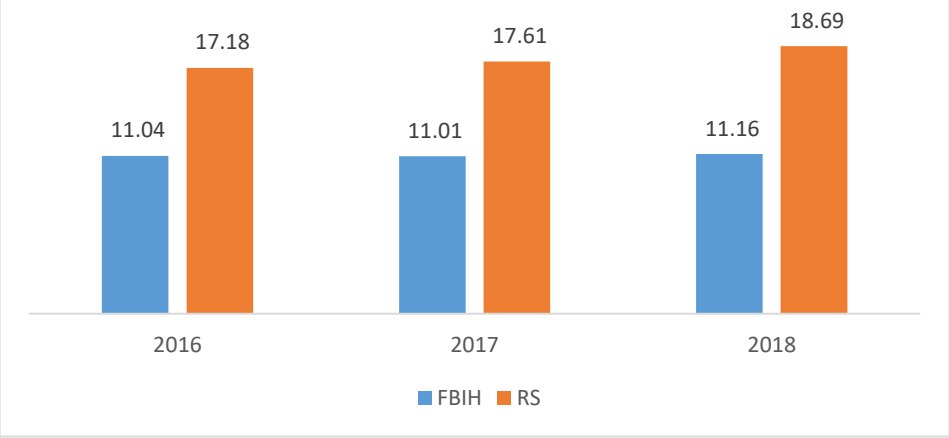
help decrease spending on pharmaceuticals and expand financial protection of people in both entities.

Inefficiencies in the organization of preventive and primary care services lead to avoidable hospitalizations

7. **The resolution capacity of primary health care seems to be inadequate in addressing the growing burden of NCDs.** With just about 3.3 visits in the Federation of Bosnia and Herzegovina and 3.6 visits in Republika Srpska to family doctor per person per year, participation of primary care professionals in provision of adequate health care is potentially insufficient. High levels of referrals to specialized care (27 percent of all visits in the Federation of Bosnia and Herzegovina, although decreased from 35 percent in 2014), are indicating that the use of primary health care can be improved.

8. **Hospitalization rates per 100,000 population differ for the Federation of Bosnia and Herzegovina and Republika Srpska**, with about 60 percent more cases hospitalized in Republika Srpska compared to the Federation of Bosnia and Herzegovina. Hospital discharges increased even more in the last three years in Republika Srpska (Figure 1). At the same time, hospital expenditures made 39 percent of total health expenditures in the Federation of Bosnia and Herzegovina and 30 percent in Republika Srpska in 2018, suggesting that the load on hospitals in Republika Srpska is higher with less financing, which can also be a driver of accumulated arrears.

Figure 4.1. Inpatient care discharges per 100 population

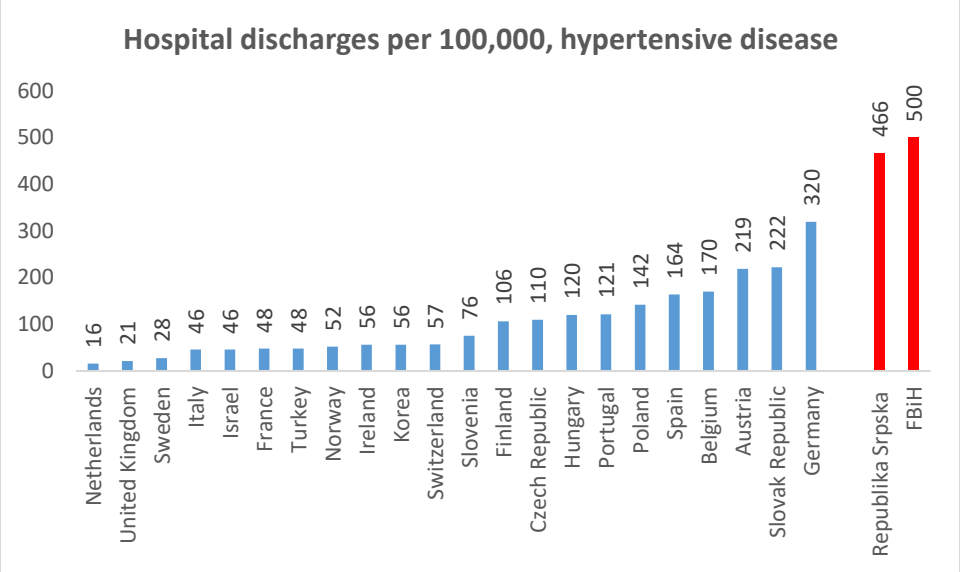


Source: Health Statistics Annual, Federation of Bosnia and Herzegovina; Statistical Yearbook, Republika Srpska Institute of Statistics

9. **Hospital discharges for selected causes are, however, higher in BiH than in EU countries**. For example, hospitalizations of patients with hypertension times higher than in Slovenia or Hungary. According to WHO assessments of ambulatory-sensitive hospitalizations,[54] there was significant room for decreasing avoidable hospitalizations for hypertension in studied European countries (83 percent in Germany and 66 percent in Portugal). Although there were no similar studies in BiH, the results from other countries suggest that in both entities improvements from better management of patients with hypertension could be dramatic.

[54] Assessing health services delivery performance with hospitalizations for ambulatory care sensitive conditions. WHO, 2016. https://www.euro.who.int/en/health-topics/Health-systems/primary-health-care/publications/2016/assessing-health-services-delivery-performance-with-hospitalizations-for-ambulatory-care-sensitive-conditions-2016

Figure 4.2. Comparison of hospitalization rates for hypertension in BiH and select OECD countries



Source: Extracted from OECD.Stat, data for 2018 or latest available year https://stats.oecd.org/index.aspx?queryid=30166

Expected economic benefits of the project

10. **The proposed project comprises complex system interventions that focus on service delivery, financing/purchasing, and capacity building,** as illustrated by Figure 1 ("The project's Theory of Change") in Section II: Project Description. In principle, efficiency in health spending will be achieved through multiple channels. The biggest gains are likely to come from improving quality of care and optimizing service delivery - in particular, more focused prevention of NCDs through strengthened prevention and risks screening, shifting management of NCDs, such as hypertension and diabetes, from the hospital sector to primary care. Efficiency should also be improved by improving accessibility of primary care and revising incentives for better performance at primary care level. The higher share of funding allocated to primary care should help strengthen material base of primary care practitioners, provide more incentives for providing improved access to care for people living in remote areas and for the uninsured.

11. **Stronger primary care is critical to improving health outcomes through better prevention, detection and management of NCDs.**[55] The Public Health Interventions Cost-effectiveness Database, hosted by the National Institute for Health and Clinical Excellence in the United Kingdom (http://www.crd.york.ac.uk/CMS2Web/), finds that many primary care interventions are highly cost-effective in tackling risk factors such as overweight/obesity, lack of physical activity, or smoking. Improved health status is achievable through better detection and management of chronic diseases. Cervical cancer cases, potentially preventable by screening, were estimated at 28-36 percent of total during 2017-2040 in six Baltic, central, and eastern European countries.[56] In diabetes care, important factors are lifestyle interventions and timely treatment.

[55] WHO, 2018: Building the economic case for primary health care: a scoping review. WHO publishing, Geneva.
[56] Vaccarella et al. Improving cervical cancer screening in Baltic, central, and eastern European countries. The Lancet Oncology, Volume 17, Issue 10, October 2016, Pages 1349-1350. https://www.sciencedirect.com/science/article/pii/S1470204516302753

12. **The focus of the project on improving the quality of care over the long run** (by strengthened data reporting and exchange between different providers, improved guidelines, and better analysis of health care quality and performance indicators, and focused training for primary care practitioners) can be expected to generate savings through better prevention and management of NCDs, also by avoiding complications.

13. **Revising the prices of pharmaceuticals and implementation of health technology assessments based on cost-effectiveness considerations will improve the technical and allocative efficiency of government spending**, by drawing on international best practice and evidence to support effective procurement. Savings can be generated from centralized procurements and better control of prescriptions. For example, the authors of the paper discussing prescriptions of drugs in BiH suggest that the reported increases in the use of angiotensin converting enzyme inhibitors in 2013-2014 are merely related to tender procedures of procurement of drugs in hospitals.[57] The potential savings from the rationalized procurement would help improve the available fiscal space and, potentially, improve access to essential drugs, resulting in reduction of out-of-pocket spending incurred from the cost-sharing for pharmaceuticals received by patients in ambulatory care and hospitals.

Cost-benefit Analysis

14. **This section analyses the expected impact of the project on the expenditures and results of the health sector** in BiH and estimates whether it is a worthwhile investment for the WB and BiH by comparing expected results of the project interventions and costs associated with project implementation. Not all of these anticipated benefits can be quantified. In this analysis, estimations are limited to quantification of the most important and relevant efficiency gains of the proposed project.

15. **It is not possible to quantify all economic benefits potentially generated by the program**. Any significant increases in the share of public expenditure or increased share of GDP invested in health are also not expected. The economic analysis, therefore, focuses on estimating benefits from improved health outcomes and improvements of efficiency within the available fiscal space:

    (a) gains in health outcomes from increased quality of care; and

    (b) results from the better management of ambulatory-sensitive conditions and prevention of avoidable hospitalizations.

16. **These analyses are then combined to give a cumulative estimate of health impact and efficiency gains** of the proposed investment. The analysis uses quantitative information obtained from literature review. It also relies on several assumptions, in line with previous economic analyses conducted for WB-financed projects in the health sector.

17. **The costs of the project are mostly determined by its expenditures**. The investment in the project will amount to a total of USD 75 million. Total expenditure of the project is expected to grow incrementally, as presented in Table 4.1.

[57] Selmanovic K, Zec SL, Vanis N, Zecevic L, Setkic M, Rasic A, et al. Antihypertensive drugs in Bosnia and Herzegovina for the time-period 2013–2015. Mater Sociomed (2016) 28:116–20.10.5455 *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4851497/*

Table 4.1. Total expenditures associated with the implementation of the project

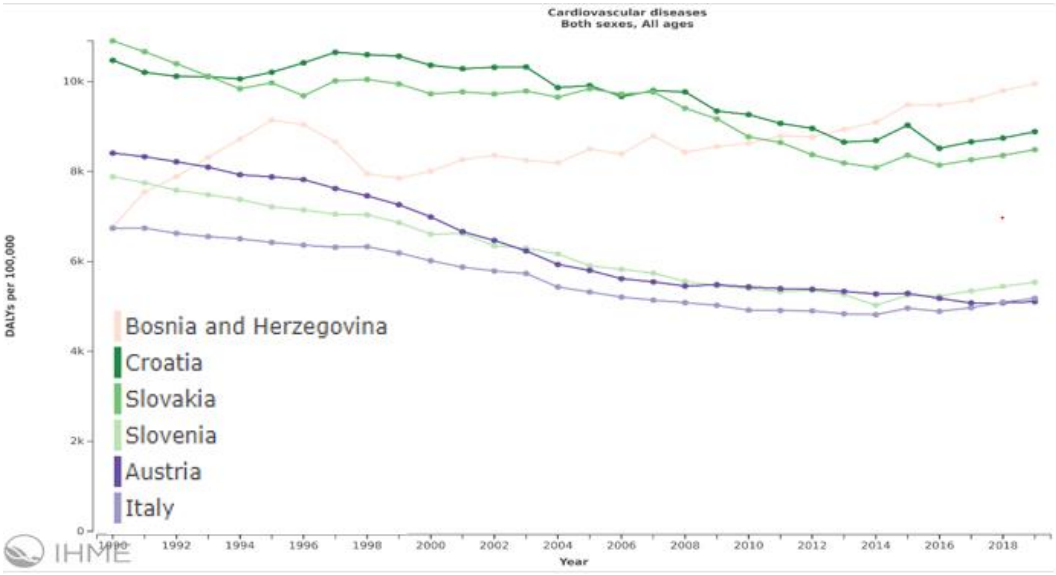
	2022	2023	2024	2025	2026	2027	2028	2022-2028
Project expenditures (million USD), by year	0.7	4.3	5.1	8.0	21.2	20.5	15.2	75.0
Project cost as % of health expenditures	0.0	0.2	0.3	0.4	1.1	1.0	0.7	Average 0.5%

The estimates of project impacts, and their monetarization, is described in more detail below.

Gains in health outcomes from increased quality of care

18. **Largest improvements are expected from better management of CVDs**. According to the data of the Institute for Health Metrics and Evaluation, ischemic heart disease and strokes are top causes of death and disability in the country.[58] Analyzing trends for DALYs in BiH over the last 20 years and comparing them to geographically close countries (Figure 3), higher losses of DALYs are observed in BiH than in neighboring Croatia and Slovenia.

Figure 4.3. Trends in disability-adjusted life years in BiH and select countries



Source: IHME

19. **Since the project will aim at improvement of quality of care at different levels of service delivery, this analysis will estimate potential positive effects from such improvements on losses in DALYs from CVDs**. Effects of antihypertensive treatment in the age group of people older than 60 years is well documented[59] as well as interventions to improve levels of physical activity in combination with other positive lifestyle choices.[60] Similar

[58] http://www.healthdata.org/bosnia-and-herzegovina

[59] Musini VM, Tejani AM, Bassett K, Puil L, Wright JM. Pharmacotherapy for hypertension in adults 60 years or older. Cochrane Database of Systematic Reviews 2019, Issue 6. Art. No.: CD000028. DOI: 10.1002/14651858.CD000028.pub3 *https://www.cochrane.org/CD000028/HTN_pharmacotherapy-hypertension-adults-60-years-or-older*

[60] Lacombe, J., Armstrong, M.E.G., Wright, F.L. *et al.* The impact of physical activity and an additional behavioural risk factor

to assumptions applied in other similar interventions supported by WB-financed projects, it was assumed that the project would reduce losses in DALYs from CVDs by up to 0.5 percent annually over 5 years (reduction of 0 in the first year of project implementation).

Results from better management of ambulatory-sensitive conditions and prevention of avoidable hospitalizations

20. **The project will help improve health services delivery performance with reduced hospitalizations for ambulatory care-sensitive conditions, specifically hypertension and other ambulatory care-sensitive conditions**. Such measures will offer space to implement revisions of the tariffs used within the DRG system in the Republika Srpska to incentivize the use of outpatient and day-hospital care, where appropriate, in line with updated clinical guidelines. In the Federation of Bosnia and Herzegovina, the project is also expected to incentivize results-based payments in hospitals.

21. **Since hospitalization rates are different in the Federation of Bosnia and Herzegovina and Republika Srpska, the project is expected to have a larger effect in terms of avoiding hospitalizations in the Republika Srpska**. In the projection, the share of avoidable hospitalizations in the Federation of Bosnia and Herzegovina is taken at the level of 10 percent of total hospitalization rate, and this share is yearly reduced by 10 percent over the period of 5 years. In the Republika Srpska, the estimated share of avoidable hospitalizations is estimated as 20 percent of total hospitalizations. As a potential effect of the project, the share of avoidable hospitalizations in Republika Srpska are projected to decrease yearly by 10 percent over the period of 5 years. Since the large part of hospital costs are labor costs, which is unlikely to change during project implementation, efficiency gains for prevented hospitalizations are estimated at 20 percent of average hospitalization cost in both entities.

Assumptions and sensitivity analysis

22. The assumptions used in the cost-benefit analysis are listed below and summarized in Table 2.
    - ***Basic discount rate*.** Financial costs (project costs) and financial savings (from project interventions) were discounted at 4.5 percent to account for future inflation and the time value of money. A higher discount rate of 10 percent was used in the high scenario.
    - ***Health benefits*.** The health benefits were calculated based on the potential reductions in losses of DALYs related to CVDs. The DALYs for BiH were obtained from the Institute for Health Metrics and Evaluation and were projected until 2027 based on historical trends between 2010 and 2019 for no intervention scenario.
    - ***Monetary value of health benefits*.** In the baseline and low scenarios, each DALY was valued at GDP per capita (USD 6,073 in 2019, with respective projections). In the high scenario, each DALY was assigned a value of two times the per capita GDP, as commonly used in the benefit-cost analysis literature.[61]
    - ***Discount rate of the monetary value of future health benefits*.** The monetary value of the future stream of health benefits (annual loss of DALYs averted) is discounted at 3 percent based on the

on cardiovascular disease, cancer and all-cause mortality: a systematic review. *BMC Public Health* **19,** 900 (2019). https://doi.org/10.1186/s12889-019-7030-8

[61] Chang, A., S. Horton, and D. T. Jamison (2018). "Benefit-Cost Analysis in Disease Control Priorities." In Disease Control Priorities (third edition): Volume 9, Improving Health and Reducing Poverty, edited by D. T. Jamison, H. Gelband, S. Horton, P. Jha, R. Laxminarayan, C. N. Mock, and R. Nugent. Washington, DC: World Bank.

recommendations outlined by WHO and the Disease Control Priorities Project. In the low scenario, the discount rate is set at 7 percent.

Table 4.2. Key Inputs and Assumptions Used for the Cost-Benefit Analysis

Key Inputs	Baseline Scenario Assumptions	Sensitivity Analysis	
		Low Scenario	High Scenario
Monetary value of DALY	1 x GDP per capita	1 x GDP per capita	2 x GDP per capita
Discount rate of the monetary value of future health benefits	3%	7%	3%
Basic discount rate	4.5% (1.5% inflation; 3% time-value of money)	4.5%	10%
Benefits of interventions in terms of DALYs averted	Improved primary and specialized CVD care: up to 0.5% reduction in DALYs	Improved primary and specialized CVD care: up to 0.5% reduction in DALYs	Improved primary and specialized CVD care: up to 0.5% reduction in DALYs
Savings from optimized procurements and hospitalizations	Costs of supplies reduced by 5%; 10% and 20% reduction of avoidable hospitalizations in FBiH and RS respectively	Costs of supplies reduced by 5%; 10% and 20% reduction of avoidable hospitalizations in FBiH and RS respectively	Costs of supplies reduced by 5%; 10% and 20% reduction of avoidable hospitalizations in FBiH and RS respectively

Results

23. **Under the baseline scenario, the combined net present value of the project is estimated to be USD 149.6 million**. The combined benefit-cost ratio for the project is estimated to be 4.3, and the internal rate of return is estimated at 19 percent. Even under the low scenario, the project demonstrates a significant development impact with a benefit-cost ratio of 3.7, and a net present value of USD 130 million. An additional calculation for a more conservative estimate of 1 DALY gained, at 70 percent of per capita GDP, was performed to account for the fact that CVDs usually affect older adults. The benefit-cost ratio of 1.3 for the project in this case suggests that every USD invested will return at least USD 1.3 in benefits. It is important to note that even the baseline scenario is conservative and likely to underestimate the full impact of the project, and not include the potential impact of several cross-cutting interventions, including additional efficiency gains. Spillover effects from strengthening the purchasing function and better accountability of health care providers are also expected to generate substantial benefits across the health system. In addition to the productivity losses associated with CVDs, chronic diseases can lead to impoverishment due to the high associated health expenses. Chronic diseases require longer periods of inpatient, outpatient, and drug treatment than acute communicable diseases. By preventing and treating CVDs and other chronic conditions more effectively, the project is also expected to avert some of the macroeconomic and microeconomic costs of diseases.

Table 4.3. Key Results for the Cost-Benefit Analysis

Outputs	Base Scenario	Low Scenario	High Scenario
Nominal benefits of the project:	**$255.9**	**$222.9**	**$432.0**
(i) Benefits of interventions in terms of DALYs averted, real terms	$176.1	$143.7	$352.2
(ii) Savings from optimized procurements and hospitalizations	$79.8	$79.8	$79.8
Net present value of the project, million USD	**$149.6**	**$130.7**	**$292.6**
Benefit-cost ratio	**4.3**	**3.7**	**9.4**

ANNEX 5: Objectives and activities of the linked Trust Funds

1. **Alongside the investments and financial assistance offered by the WB investment program, successful and lasting modernization of BiH's health systems will require substantial technical assistance**. Therefore, to leverage maximum impact from the planned investment program, a MDTF is being established. This will finance advisory services and analytics, training, consultancies, communications and outreach activities that are not financed by the planned investment program.

2. **Specific activities within this MDTF proposal were identified and agreed with government counterparts through a structured process.** Activities were discussed with working groups created specifically to guide project design in Republika Srpska (on health care quality, governance, and financing) and in the Federation of Bosnia and Herzegovina (in Sarajevo, Herzegovina-Neretva and Tuzla Cantons). In each case, the working groups comprised Directors from the HIFs and from health care providers, the quality agencies, senior officials from the ministries of health, and professional leaders. The design of the MDTF is also based upon analytical and advisory engagement that the WB has established with the health authorities in Bosnia and Herzegovina over several years. This work includes the *Health Care Arrears in Bosnia and Herzegovina* undertaken jointly with the WB's Macroeconomics, Trade and Investment Practice, and more recently a *Functional Review of the Health Sector*, undertaken jointly with the Governance Practice.

3. **Activities financed by the MDTF are fully aligned with the planned investment program and are critical either in terms of creating the enabling conditions for the investment program to become established and/or to its sustained success**. Activities are either:

    - Bank-executed: analytics and advisory services that draw upon the expertise of the WB, development partners, and contracted consultants; and
    - Recipient-executed: practical activities (such as training) that are best delivered by the relevant local agencies, and/or analyses and reforms, which carry greater political, institutional or implementation risk and, therefore, need a high degree of local ownership.

4. **Two complementary phases of work are envisaged**:

    - Phase 1 (Years 1-4) comprises foundational analytics and advisory activities that are needed for health sector reforms, and WB's investment program, to take root. These are largely Bank-executed studies. Recipient-executed training (of both clinicians and health care managers) on topics relevant to the reform program is also included in this phase.
    - Phase 2 (Years 5-8) builds upon Phase 1. Its primary focus will be to build self-sustaining and integrated programs of continuing professional development (CPD) for both clinicians and health care managers. Building these structures and programs will be a recipient-executed activity and will draw upon the experience gained in phase 1. Some recipient-executed analytics (of complex topics that carry greater political, institutional or implementation risk and require phase 1 studies to have been completed) are also included in Phase 2.

Addressing weaknesses in preventive and primary care.

5. **MDTF activities in this domain comprise technical assistance to strengthen primary care in BiH's health system, particularly for patients with NCDs.** These activities will be critical to achieve the objective of reducing the burden of NCDs and avoiding unnecessary hospitalization, thereby improving population health, health care quality and health sector sustainability. The expected outcomes for patients, their care takers, health care workers and citizens from MDTF activities in this domain are: increased knowledge on how to effectively prevent and treat complex, chronic conditions and reduce unnecessary hospital admissions; better health outcomes, including patient satisfaction, for people with complex, chronic conditions; and increased capacity, at system- and at facility-level, to consistently deliver high-quality and financially sustainable health care services.

Bank-executed, Phase 1:

6. **Update of clinical guidelines for management of NCDs**: WB and contracted experts will support patient groups, professional associations, and health insurance funds in each entity to update clinical guidelines, standards, and quality indicators for four high-prevalence NCDs (such as hypertension or diabetes). The objective will be to apply up-to-date evidence and international good practices to the BiH context to expand the role of primary care in NCD management.

    - Planned output: updated clinical guidelines for four NCDs in each entity; one dissemination event in each entity.

7. **Workforce optimization assessments**: based upon the updated guidelines from the previous activity, WB and contracted experts will support patient groups, professional associations, and health insurance funds in each entity to appraise options for revising how tasks related to NCD management are allocated to professional groups. The objective will be to ensure that the health care workforce is used as efficiently as possible in the management of NCDs. Expanding the role of nurses in the primary care management of NCDs will be emphasized, in line with evidence and international good practice. This activity will offer an opportunity to translate the lessons emerging from the Swiss Development Cooperation (SDC) projects to strengthen community nursing and expand nurse-led prevention and management of NCD risks into guidelines, standards, and quality indicators that work in the BiH context and that can become mainstreamed. As such, SDC's project partners and implementing agency for the BiH nursing projects could be contracted to deliver this part of this activity.

    - Planned output: one report for each entity and one synthesis report to summarize findings and provide overall recommendations for optimization; one dissemination event in each entity.

Recipient-executed, Phase 1:

8. **Training on advanced primary care**: the MDTF will support ministries of health and professional associations to develop training programs that support the delivery of advanced primary care for NCDs, both system-level and in individual hospitals/clinics, drawing upon the outputs from activities 1 and 2. Local authorities will be supported to choose training topics that deliver a systematic, coherent, and sustained approach to skills-building that meets local needs.

    - Planned output: eight training events per year, in each entity.

Recipient-executed, Phase 2:

9. **Creation of a sustained and integrated CPD program for clinicians and health service managers**. Training on advanced primary care: the MDTF will support ministries of health and professional associations to develop

programs of CPD,[62] at both system-level and in individual hospitals/clinics. The structures, policies, and incentives needed to make these programs mainstreamed and self-sustaining will also be supported. These CPD programs will build upon the training events delivered in Phase 1 (for example, the management of complex, chronic disease in primary care), and will draw upon the experience gained in that phase.

Addressing inefficiencies in hospital care

10. **MDTF activities in this domain comprise technical assistance to improve the quality and efficiency of hospital-based care, including updating of the prices paid by health insurance funds for secondary care services and the concentration of hospital services into fewer, specialist centers.** These activities will help achieve the objective of improving the efficiency of secondary care, thereby improving health care quality and sustainability. The expected outcomes for patients, their care takers, health care workers, and citizens from MDTF activities in this domain are: better health outcomes, including patient satisfaction, for people admitted to hospital; more efficient use of health system resources in the secondary care sector; and increased capacity, at system- and at facility-level, to consistently deliver high-quality and financially sustainable health care services.

Bank-executed, Phase 1:

11. **Repricing of services**: WB and contracted experts will work with health care providers and health insurance funds to determine the true cost of care for selected care pathways, used by patients with selected NCDs. This work will follow and draw upon activities 1 and 2. The objective will be to ensure that health care providers are receiving accurate reimbursement for packages of evidence-based care for patients with NCDs, with expanded use of primary care and nursing roles, thereby improving financial sustainability of health care providers.

    - Planned output: one report for each entity and one synthesis report to summarize findings and provide overall recommendations; one dissemination event in each entity.

Bank-executed, Phase 2:

12. **Appraising options for hospital network plans**: WB and contracted experts will work with health care providers, patient groups, professional associations, and health insurance funds to examine options for creating hospital networks (within and, where appropriate, across entities). This work will follow and draw upon activities 1, 2 and 4. The objective will be to concentrate services into fewer, specialist providers, thereby improving health care quality and financial sustainability.

    - Planned output: one report for each entity and one synthesis report to summarize findings and provide overall recommendations for optimization; one dissemination event in each entity.

Recipient-executed, Phase 1:

13. **Training on performance monitoring and improvement at service and facility level**: the MDTF will support ministries of health and professional associations to develop training programs for health services managers on

[62] CPD refers to learning activities that go beyond mandatory training and education undertaken by professionals for the purpose of developing new skills and enhancing their current capabilities. It comprises a wide range of formats, including classroom-based learning (for example, university post-graduate courses); workshop participation (organized internally, for example, or by professional chambers); online training programs; conferences and lectures; and, practical work experience.

modern techniques of quality monitoring and improvement, such as Plan-Do-Study-Act cycles. Local authorities will be supported to choose training topics that deliver a systematic, coherent, and sustained approach to skills-building that meets local needs.

- Planned output: eight training events per year, in each entity.

Recipient-executed, Phase 2:

14. **Creation of a sustained and integrated CPD program for clinicians and health service managers**. Training on advanced primary care. See earlier text.

Addressing lack of effective financial controls:

15. **MDTF activities in this domain comprise technical assistance to improve budget planning, execution, and monitoring, particularly in hospitals and health insurance funds** (the sources of the greatest amount of arrears in BiH's health systems). These activities will be critical to achieving the objective of improving health systems' sustainability. The expected outcomes for patients, their care takers, health care workers, and citizens from MDTF activities in this domain are: increased capacity, at system- and at facility-level, to consistently deliver high-quality and financially sustainable health care services.

Bank-executed, Phase 1:

16. **Adapting health system accounting protocols to treasury system**: WB and contracted experts will work with ministries of health, ministries of finance, health care providers, and health insurance funds to adapt health system accounts to be compatible with the treasury system format (USAID has expertise in this area and is willing to deliver this activity).

- Planned output: adapted protocols in each entity, and hands-on training events for each health care provider (or groups of providers) and health insurance fund

17. **Options for expanding centralized procurement of goods and services**: WB and contracted experts will work with ministries of health, health care providers, and health insurance funds to appraise options for greater shared, or centralized, procurement of goods and services in BiH's health systems, including 'hotel services' such as catering or cleaning. Options for centralizing procurement across the Federation of Bosnia and Herzegovina and Republika Srpska for high-cost goods and services will also be appraised (recognizing that political will to move toward shared procurement is not yet strong).

- Planned output: one report for each entity and one synthesis report to summarize findings and provide overall recommendations; one dissemination event in each entity.

Recipient-executed, Phase 1:

18. **Training programs on: budget planning, execution and monitoring (including migration to the treasury system).** The MDTF will support ministries of health and professional associations to develop training programs for health services directors and managers on financial management (to improve capacity in financial analysis, reporting, and planning); migration of health insurance funds and health care providers to the "Treasury System" (to improve reporting on liabilities, overdue unpaid liabilities, and financial risk). Local authorities will be supported to choose training topics that deliver a systematic, coherent, and sustained approach to skills-building that meets local needs.

- Planned output: eight training events per year, in each entity.

Recipient-executed, Phase 2

19. **Creation of a sustained and integrated CPD program for clinicians and health service managers**. Training on advanced primary care. See earlier text.

20. **Definition/revision of basic benefits package**: The MDTF will support ministries of health, health insurance funds, patient groups, and professional associations to (re-)define the health care services that are covered by publicly-funded health care insurance (the "basic benefits package"). This is a complex, but essential function, well-developed in all high-performing health systems, but currently lacking in BiH.

- Planned output: eight training events per year, in each entity.

Addressing weak incentives and accountability in the health sector

21. **MDTF activities in this domain comprise technical assistance to strengthen the incentives at system- and facility-level that can help drive improved health system performance.** Enhancing transparency and public accountability of health care providers (both public and private) and health insurance funds in BiH is an important step in this direction. The expected outcomes for patients, their care takers, health care workers, and citizens from MDTF activities in this domain are: better awareness of and responsiveness to citizens' expectations from local health care providers and from the health care system; greater capacity to tackle corruption, conflicts of interest and other instances of poor governance, at system- and at facility-level.

22. **A smaller, stand-alone TF financed by the United Kingdom, focused on health system transparency and accountability in BiH, is already operational**. This smaller TF is supporting the creation of a strategic framework and online platforms to enable greater citizen engagement in the design, delivery, and performance monitoring of health care services. It, therefore, lays the groundwork for the activities of the MDTF in this domain.

Bank-executed, Phase 1 and 2:

23. **Facilitation of government consultations with civil society to establish shared goals for health sector development:** WB and contracted experts will work with ministries of health, health care providers, and health insurance funds to support technical support to four-to-six entity and cantonal health systems to undertake consultations with and build community-, patient- and care-taker groups, and establish shared goals for health sector development. This activity would be designed to complement, rather than duplicate or replace, existing efforts at community engagement, such as the Local Action Groups and 'communities that care' models. Special effort will be made to include marginalized communities, and to create mainstreamed and sustainable platforms for community engagement.

- Planned output: two formal civil society engagement events per year in each entity.

24. **Consultation and advocacy targeted to decision makers and health professionals to facilitate reforms**: WB and contracted experts will engage with key stakeholders in ministries of health, health care providers, and health insurance funds to build consensus for and facilitate the health sector reforms supported by development partners, as set out in the Joint Socioeconomic Reform Program. The objective will be to better understand and mitigate political and institutional risks to the successful and sustained implementation of reforms.

- Planned output: two formal health systems stakeholder engagement events per year in each entity.

25. **Communication and media campaigns targeted to citizens to explain and build support for reforms**: WB and development partners will deliver communication and media campaigns targeted to citizens to explain and build support for the reforms supported by development partners, as set out in the Joint Socio-Economic Reform Program. Special effort will be made to include marginalized communities.

- Planned output: two communications and media campaigns per year in each entity.

Recipient-executed, Phases 1 and 2:

26. **Self-assessments of transparency**: the MDTF will support four to six ministries of health (at entity- and cantonal level) to undertake self-assessments of transparency and accountability, and identify steps to make improvements, using standardized tools such as those developed by the *Transparency International* non-governmental organization. The objective will be to increase health system stakeholders' capacity in monitoring and improving transparency and accountability. The quality of public engagement and communications during the COVID-19 pandemic will be highlighted as an area to self-assess.

- Planned outputs: one synthesis report to summarize findings and provide overall recommendations for strengthening transparency and accountability; one dissemination event.

Addressing health care systems' under-funding

27. **MDTF activities in this domain comprise analytics and advisory services that will help BiH authorities appraise the options for expanding the revenue base for health insurance and health care services and undertake legal and regulatory reforms to pursue the most appropriate options.** This is important because BiH's health systems are, most likely, under-funded for the level of service that they seek to provide (and that patients expect). Therefore, these activities will be critical to achieve the objective of improving health systems sustainability and, ultimately, preserving health care access and quality. The expected outcomes for patients, their care takers, health care workers and citizens from MDTF activities in this domain are: increased revenues, at system- and at facility-level, to consistently deliver high-quality and financially sustainable health care services

Bank-executed, Phases 1 and 2:

28. **Studies appraising options to expand revenue base for the health sector**, including taxes on pollution, tobacco, sugary drinks; delinking health insurance from employment; switching to general tax revenue for the HIF; revising categories of persons exempt from contributing to health care insurance and/or degree of exemption.

- Planned outputs: four studies; one dissemination event in each entity.

ANNEX 6: Country Program Adjustment Responding to COVID-19

1. **The World Bank Group's engagement in Bosnia and Herzegovina has been guided by the Performance and Learning Review[63] which re-affirmed the priority areas of the FY16-20 World Bank Group's CPF[64]** focusing on efficiency of public sector, private sector growth and resilience to natural shocks, with a cross-cutting focus on inclusion. The 2020 Systematic Country Diagnostic Update[65] concludes that the human capital is BiH's biggest asset, and losing this human capital is the biggest risk facing the country.

Impact of the COVID-19 pandemic on the country and government response

2. **The COVID-19 poses the most serious social and economic challenge to the country since the 2008-09 global financial crisis.** The pandemic has had a major impact on the country's economy through slowdown in key productive sectors, lower demand for BiH exports and the spike in unemployment. Real GDP is projected to decline this year by 3.2 percent (vs. 4.8 percent for the Western Balkans, and 4.4 percent for the ECA region). The sectors most affected by the pandemic were health, tourism, transport and agriculture. The number of registered unemployed increased by 4.7 percent during 2020. This does not account for informal jobs, which are deemed to represent a third of economic activity. BiH's fiscal outlook has deteriorated sharply this year and may undo much of the work the government has done recently on fiscal consolidation. Higher public spending on crisis-related measures and the related slump in tax revenue will result in a 2020 fiscal deficit estimated at 4.2 percent of GDP, down from an estimated surplus of 0.8 percent in 2019. Because BiH has no access to international markets, the fiscal deficit has been financed primarily through borrowing domestically and from multilateral lenders. Poverty is also expected to increase from 11.8 to 14.6 percent due to job losses and lower remittances. In the absence of assistance, 85 thousand individuals are at risk of falling into poverty as many of those at risk are not covered by social protection programs. The pandemic compounded long-standing structural challenges undermining BiH's development potential, including a large and inefficient public sector, a private sector stifled by difficulties in business environment, limited export competitiveness, rapid loss of human capital to emigration and deficiencies in health and education.

3. Authorities in BiH have responded to COVID-19 with an array of measures to protect citizens, affected economic sectors and households and to strengthen health sector resilience. Both entity governments established economic stabilization and guarantee funds to support firms and individuals. In addition, the government of the Federation of Bosnia and Herzegovina adopted the Law on mitigation of negative economic consequences as result of COVID-19 while RS introduced one-off support to health workers and police. By June 2020, the entity governments allocated about BAM 100 million (0.28 percent of GDP) for pandemic-related health spending. Additional measures included: BiH joining the Central European Free Trade Agreement's green line; the BiH Presidency endorsing the EU April 9 agreement on joint procurement of medical equipment; and the entities extending tax application deadlines to April 30 (May 31 for entrepreneurs in the Federation of Bosnia and Herzegovina).

[63] Report No. 130043-BA discussed at the Board on January 30, 2019.
[64] Report No. 99616-BA, discussed at the Board on December 15, 2015.
[65] Report No. 148573-BA, presented at the Board on May 18, 2020.

WBG support for responding to the crisis

4. The current CPF proposed a lending program of up to USD $750m of which USD $420m has been committed. While preparation of the next CPF is delayed by the COVID-19 crisis, the dialogue with authorities prior to the crisis focused on three emerging priorities: i) unleashing the potential of the private sector for faster growth and jobs; ii) investing in human capital; and iii) managing the environment for sustainable growth. Improving efficiency of the public sector also emerged as a cross cutting theme. These priorities remain valid and the urgency to address them has increased.

5. **In the initial (FY20) response to the economic crisis arising from the pandemic, the WBG responded through portfolio restructuring and preparing a new COVID-19 Emergency operation, in line with the Approach Paper "Saving Lives, Scaling-up Impact and Getting Back on Track".**

- *To save lives* – in FY20, the WB approved $36.2 million from the Fast Track Facility for COVID (P173809). This operation supports the response capacity of the healthcare sector, new laboratories and procurement of medical equipment as well as social assistance to 48,000 households most affected by the pandemic.
- *To protect the poor and vulnerable* – the WB is conducting the BiH Functional Review of the Education Services which will provide recommendation and guidance to the BiH authorities on the education sector reform and the measures to protect human capital. The WB has restructured BiH Employment Support Program (P152347) to deploy resources to support vulnerable targeted groups (women, age 40+, youth or long-term unemployed).
- *To save livelihoods, preserve jobs, and ensure more sustainable business growth and job creation* – the WB responded with the new projects: the $73 million Agriculture Resilience and Competitiveness Project (P171266) will contribute to recovery and resilience by modernizing production processes and enhancing the quality and competitiveness of agriculture products to facilitate access to EU markets; the $75 million Water Supply and Sanitation Modernization Program (P168943) will enhance the financial and operational sustainability of water supply and sanitation and the $50 million Forest Economy Development Project (P171513) will support forestry-based economic activities, with emphasis on enabling higher value-added production and exports. Business Environment Strengthening Project has been canceled and replaced with the $63.5 million Firm Recovery and Support Project (P174604) that will directly support recovery of the private firms affected by the economic impact of COVID-19 through access to finance and consolidated firm-targeting public support programs.
- *To strengthen policies, institutions and investments for resilient, inclusive, and sustainable growth* – the new $75 million Development Policy Operation and the $75 million Health Sector Reform IPF are being prepared to help achieve more efficient and financially sustainable health systems in BiH. The program will include a set of policy actions focusing on relevant reforms, fiscal management and health-related environmental issues. In addition, the WB is providing technical assistance through Commercial Justice project to reform the commercial court system to enhance business environment.

Selectivity, Complementarity, Partnerships

6. The plans for portfolio restructuring and new lending have been discussed with authorities and have been shared with the other main development partners, who are keenly supportive. There is a close coordination with the IMF, the European Bank for Reconstruction and Development, the European Investment Bank, the EU,

Sida (Sweden's government agency for development cooperation), Swiss and other IFIs and donors. The IMF Executive Board approved USD 361 million in emergency support to BiH to address the COVID-19 Pandemic. EIB has launched a set of emergency measures for the Western Balkans including the approval of dedicated new financing with more flexible terms and extended eligibilities in support of the healthcare sector and small- and medium-sized enterprises affected by the pandemic. Swiss continue delivering in line with their strategy on economy and employment with a strong focus on youth employment. The German Development Agency has an extensive program to address capacity constraints and introduce effective management of grant schemes, aimed at helping BiH institutions strengthen management of the economic support measures for entrepreneurship, export-oriented sectors, and tourism. Furthermore, EU has allocated around EUR 300 million to support agriculture development, medium and small enterprises facing COVID-19 crisis and public sector reform.