Accessible Quality Healthcare Project: Assessment of the Quality of Care in Primary Health Care Facilities



SDC project implemented by Swiss TPH

2016-2018-2023



Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

Swiss Agency for Development and Cooperation SDC Swiss Agency for Development and Cooperation (SDC)

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2016-2018-2023

Survey Report September 2023

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Table of Contents

Acknowledgements	4
1. Background	5
1.1. Overview on Quality of Care	
2. Goal and Objectives	9
3. Methods	11
3.1. Study design	12
3.2. Study area & target population	13
3.3. Sample size	13
3.4. Sampling	15
3.4.1. Sampling of health facilities	15
3.4.2. Sampling of providers for provider-client observations	18
3.4.3. Sampling of patients for exit interviews	18
3.5. Questionnaire tools	18
3.6. Data management and analysis	20
3.7. Ethical considerations & clearance	20
4. Findings	21
4.1. Overall assessment of municipalities	22
4.2. Infrastructure	
4.3. Clinical Observations	39
4.4. Exit Interviews	43
5. Conclusion	47
6. Recommendations	49
7. References	51
8. Annexes	52
	52

Acknowledgements

We are very thankful to Dr. Ariana Bytyci-Katanolli, Nicu Fota, Dr. Qamile Ramadani and Dr. Merita Shehu and all the AQH staff for providing overall support to the study. We warmly thank our local study coordinator Dr. Pranvera Krasniqi and Dr. Myvedete Tershnjaku from the National Institute of Public Health Kosovo for their commitment and support in the implementation and quality assurance of the study.

Further, we are grateful to Applicable Research Solutions and its staff for ensuring a smooth implementation of data collection and field supervision. Specifically we would like to highlight the excellent work from our data collectors. Lastly, we would like to express our gratitude to all participants in our survey including facility managers, doctors and patients.

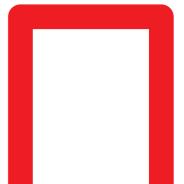
Suggested citation:

Rajkumar S, Knoblauch AM, Ramadani Q, Bytyci-Katanolli A, Fota N, Shehu M, Gerold J. Quality of Care Study 2023. Summary Report of AQH Phase I and II Project Municipalities. Accessible Quality Healthcare Project, Basel: Swiss Centre for International Health. 2023.

Background







Since the 1990s, Kosovo has struggled with an under-performing health system, which does not adequately meet the needs of Kosovar citizens for health and health services. As a result, the country has some of the worst health indicators in South Eastern Europe and ranks below neighbouring countries. The health status of vulnerable population sub-groups is a concern as financial and social barriers prevent them from accessing appropriate healthcare services.

In May 2015, the Ministry of Health (MoH) of Kosovo and Swiss Agency for Development and Cooperation (SDC) signed a cooperation agreement regarding the "Accessible Quality Healthcare" (AQH) project. The overall goal of

the AQH project is to ensure that the health of the population of Kosovo has improved, with strengthened healthcare providers and managers able to meet the needs of the patients (especially vulnerable groups), who are more aware of their rights and needs.

The AQH project in Kosovo is a SDC project and implemented by Swiss Tropical and Public Health Institute (Swiss TPH).

The objective of the study is to measure the quality of care related to structural and procedural aspects, as well as selected outcomes, in Primary Health Care (PHC) in 20 project partner municipalities in Kosovo.

The specific objectives of this study are to provide **PHC service providers** with information to:

- Assess the quality of health services provided in several PHC centres in each municipality, including specific structural and procedural aspects.
- Allow comparison of different aspects of quality of care between 20 project municipalities.
- Determine to what degree health providers have infrastructure and consumables available as outlined in the national PHC norms or, where these are unavailable, those outlined in WHO standards.
- Assess patient satisfaction with the services provided at PHC centres.

The project has the following expected outcomes:

- Outcome 1 Primary Health Care providers deliver quality services for NCDs to informed citizens
- **Outcome 2 -** Health managers ensure delivery of quality PHC services that respond to communities' needs.
- Outcome 3 The population improves its health literacy and demands better access to high quality care.

AQH I was implemented in 2016-2019 in 12 municipalities in Kosovo. In 2020, the AQH project entered phase two (2020-2023) and expanded its support to 20 municipalities (out of 38 municipalities in Kosovo).





7

A baseline and midline survey were conducted before (2016) and at the end (2018) of AQH I. The project implementation phase II started in early 2020. In 2023, the endline survey of phase II of the AQH project was conducted.

As health care service improvement activities continue to be implemented within AQH II, a continuation of repeated, cross-sectional monitoring of QoC through a survey was deemed beneficial and necessary. At the same time the Covid-19 pandemic resulted in major disruption in health services delivery with mostly undocumented positive and negative effects on quality of care and population access to services.

The present document provides a detailed report of the 2023 endline survey phase II on QoC. The survey was aligned with the two previous surveys, thus allowing to measure changes over time and to stratify results along different types of facilities.

1.1 Overview on Quality of Care

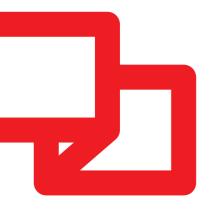
For our surveys, we consider an operational definition of the QoC of health care services based on Donabedian (1988, 1990) [1, 2], which was also used in similar studies [3, 4]. According to this definition, the QoC is characterized by three dimensions: structural attributes, the attributes associated with the process and attributes related to the outcomes. Therein, process attributes are often further sub-divided to technical and interpersonal dimensions.

The basic idea to separate three parts is based on the assumption that the three dimensions are connected in terms of service quality: good structure increases the likelihood of good processes and good process increases the likelihood of good outcomes, though outcomes are a consequence rather than a component of the quality of services.

The following definitions apply:

- Structural attributes: These attributes relate to the environment of the health service delivery. They understand the structural organization (medical personnel, internal organization and patient's payment for health services), human resources (qualified staff), and physical resources (infrastructure, equipment and drugs). In addition, the structure includes the technical performance and judgment of health personnel on patient's health situation for the provision of patient care
- Process-related attributes: These attributes relate to the interaction between patient and provider, considering the interpersonal aspects and technical aspects. Potential benchmarks of process of care may include inputs, referral from PHC facilities for laboratory examinations, preventive and treatment approaches or the ethical conduct of health workers. The definition of quality should be based and measured on local standards.
- Outcome attributes: Outcomes are considered a consequence of the quality of care, as for example survival and recovery of a patient or, more indirectly, patient satisfaction.

2. Goal and **Objectives**





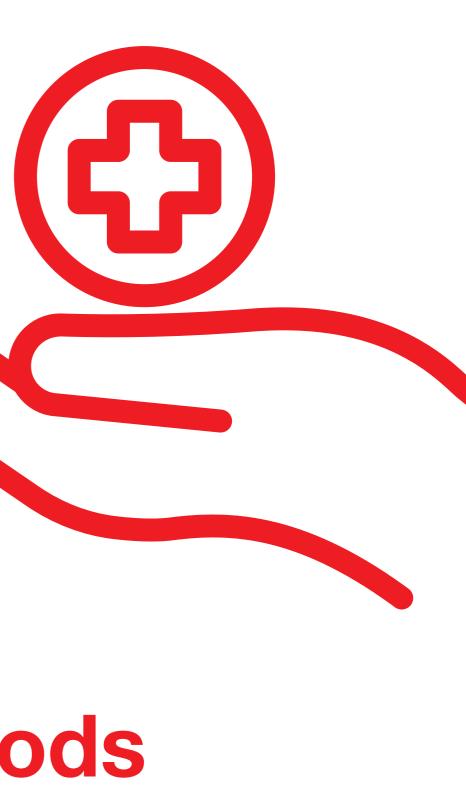
The overall goal of the present study is to measure the QoC related to structural and procedural aspects as well as selected outcomes in PHC in 20 municipalities of the AQH in Kosovo and to indicate changes over time in the various aspects related to QoC since the baseline study in 2016 and midline study in 2018.

The specific objectives of this study are:

- Assess the QoC provided by providers to patients for PHC services, including the compliance with the NCD protocols introduced through AQH II
- Assess the capacities and readiness of the health facilities in terms of infrastructure, cleanliness, maintenance, protocols and selected equipment and consumables.
- Assess patient satisfaction after medical consultation.
- Make meaningful comparisons, e.g. urban vs. rural, regions or facilities that have benefitted from rehabilitation and those not.

- Compare findings to previous measurements from the 2016 baseline and the 2018 midline surveys. (However, results are mainly compared to the 2018 results, which served as a baseline for the phase II of the project.)
- Inform selected indicators from the projects' logical framework (logframe) to monitor the improvement of health care delivery over the course of AQH.
- Interpret the findings in the context of the AQH I and AQH II activities thereby considering possible effects of the Covid-19 pandemic on routine health service delivery.

3. Methods



3.1 Study design

The methodology employed for this 2023 endline survey phase II was the same as in the 2016 baseline and the 2018 midline surveys in order to allow for comparison of findings. Hence, the study design was a (repeated) cross-sectional survey design.

The survey assessed the three dimensions of QoC in health facilities:

- i quality of the facility infrastructure (structural attributes);
- (i) quality of provider-patient interactions (process attributes); and

TABLE 1: Study design summary

	Quality of the infrastructure	Quality of doctor- patient interaction	Patient satisfaction
Target population	Health centre (respondent: appoint- ed by the health centre manager)	 Doctors (family and general medicine) Patient 	Patient
Consultation type	n/a	 Hypertension Diabetes Any kind of health consultation* 	 Hypertension Diabetes Any kind of health consultation*
Provider type	n/a	Doctors (family and general medicine doctors)	 Any health care provider (doctors, nurses, midwifes)
Tool	Health centre assessment for selected indicators	Observational tool	Exit interview questionnaire
Sample size 2023	55	1,727	948
Sample size 2018	57	1119	628
Sample size 2016	40	1013	716
Sampling	Exhaustive	Random sampling of doctors (1-3 per facility, proportional to size of facility)	Exhaustive during visit in the health centre, depending on the capacity of the data collectors

*See section 3.2 for more details

patient satisfaction after consultation (outcomes).

To cover these three dimensions, data was collected at three different levels through the following approaches:

- the health centre through a health centre assessment tool;
- the health care provider through providerclient observations; and
- the patient satisfaction through exit interviews.

A summary of key study design parameters is shown in Table 1 and completed in the detailed sections below.

3.2 Study area & target population

The 2023 QoC endline survey was conducted in the 20 municipalities covered by AQH II.

Target population of the three different dimensions assessed are shown in Table 1 above. In addition:

- For the infrastructure assessment, the respondent(s) to the questionnaire were determined with the facility manager.
- For the doctor-patient interaction, consultations for any kind of PHC services were observed but the health care providers under assessment were only doctors (family and general medicine).
 1.96)
 p = estimated proportion of patients being unsatisfied 20%
- Similarly, exit interviews was conducted with patients that came for any kinds of PHC services. Excluded were patients who consult for administrative reasons, like: renewal of driving licence and procedures conducted, issuing the permission for hunting guns, and "able to work" letters

3.3 Sample size

The design of the sample size built on a representative probability sample allowing analysing indicators for the quality of health care provided and the satisfaction of the patient. The sample was stratified according to the two domains of facilities in the study: MFMC and FMC.

The number of clusters was calculated using the equation of Bennett, Woods et al. ("A simplified general method for cluster-sample surveys of health in developing countries." World Health Stat Q, 1991, 44(3): 98-106).

 $c = p \times \frac{(1 \Box P) \Box D}{s^2 \Box b}$

Where p (or t) is the estimation of the proportion; D the design effect; s the standard error and b the average number of responses to the item per cluster. The equation was modified and adapted to the present survey using the equation:

 $c = (((t^2 x p(1-p)) / m^2) x D) / nc + 10\%.$

Where:

c = required number of cluster

t = confidence level at 95% (standard value of 1.96)

- m = margin of error at 5%
- D = design effect at 1.0
- nc = number of patients per cluster
- 10% sample loss

Assumptions

- We assumed a proportion of 20% of patients are unsatisfied with the facility.
- For the cluster size we made differentiated assumptions: for MFMC we assumed a minimum number of patients per doctor per day of 12 whilst we assumed a minimum number of patients per doctor per day of 8 for FMC.
- A relative low refusal rate (approx. 10%).
- The design effect was set at 1.0 because of the clustering (between 8-12 patients/facility).

Table 2 gives the estimation of patients for different estimations of the proportion with 10% sample loss (safety margin), using the modified equation. The number of patients is estimated for each domain. TABLE 2: Estimation of patients included in the survey for different estimations of the proportion (p) with 10% safety margin

	Proportion											
CI	2.5%	5.0%	7.5%	10.0%	15.0%	20.0%	30.0%	35.0%	50.0%			
2.0%	258	502	733	951	1'347	1'690	2'219	2'403	2'641			
2.5%	165	321	469	609	862	1'082	1'420	1'538	1'690			
3.0%	114	223	326	423	599	751	986	1'068	1'174			
5.0%		80	117	152	216	270	355	385	423			
6.5%			69	90	128	160	210	228	250			
10.0%				38	54	68	89	96	106			

We observed variations in the number of patients accessing the facilities depending on the domain and based on the number of doctors (family medicine and general doctors) working there.

Hence, we estimated the number of clusters per domain, assuming an average of 12 number of patients per doctor per MFMC and an average of 8 patients per doctor per FMC.

TABLE 3: Estimation of the number of clusters (c) per stratum (here MFMC) for different estimations of the proportion with 10% safety margin

	Proportion											
CI	2.5%	5.0%	7.5%	10.0%	15.0%	20.0%	30.0%	35.0%	50.0%			
2.0%	21	42	61	79	112	141	185	200	220			
2.5%	14	27	39	51	72	90	118	128	141			
3.0%	10	19	27	35	50	63	82	89	98			
5.0%	0	7	10	13	18	23	30	32	35			
6.5%	0	0	6	8	11	13	18	19	21			
10.0%	0	0	0	3	4	6	7	8	9			

TABLE 4: Estimation of the number of clusters (c) per stratum (here FMC) for different

	stimations of the proportion with 10% safety margin										
	Proportion										
CI	2.5%	5.0%	7.5%	10.0%	15.0%	20.0%	30.0%	35.0%			
2.0%	32	63	92	119	168	211	277	300			
2.5%	21	40	59	76	108	135	177	192			
3.0%	14	28	41	53	75	94	123	134			
5.0%	0	10	15	19	27	34	44	48			
6.5%	0	0	9	11	16	20	26	28			
10.0%	0	0	0	5	7	8	11	12			

Thus, we assumed that the following sample sizes needs to be attained:

- Information on infrastructure from all 55 health facilities
- 270 provider-patient interactions of which we assume that approximately 50% might be related to chronic conditions per facility type, thus, 540 in total
- 270 patient exit interviews per facility type, thus, 540 in total

3.4 Sampling

3.4.1 Sampling of health facilities

The sampling frame was built from all eligible health facilities (i.e. MFMC or FMC) which represented the primary sampling units. The following eligibility and inclusion criteria applied for the health facilities:

- covered by AQH II project activities in the 20 AQH II municipalities;
- at least one medical doctor working at the health facilities; and

50.0%

330

211

147

53

31

13

provision of care and prevention related to ٠ chronic diseases (e.g. diabetes mellitus, hypertension)

Thus, 20 MFMCs and 99 FMCs health facilities were considered eligible. Sample health facilities were selected among all eligible health facilities employing a probability proportional to size (PPS) sampling approach, based on the number of visits per health facility received, as notified in regional insurance directorates [5]. It was assumed that PPS took care of the urban / rural stratification at the same time.

A list of the selected facilities is given in Table 5.

TABLE 5: Selected health facilities

No.	Municipality	Inicipality Name of facility						
1	Deçan	MFMC - Deçan	MFMC					
2	Deçan	FMC- Strellc	FMC					
3	Fushë Kosovë	MFMC - "Dr.Fatmir Krasniqi"	MFMC					
4	Fushë Kosovë	FMC Bardh i Madh	FMC					
5	Fushë Kosovë	FMC Miradi e Poshtme	FMC					
6	Gjakovë	MFMC- Gjakovë	MFMC					
7	Gjakovë	FMC 4 Orize	FMC					
8	Gjakovë	FMC 5 Ereniku	FMC					
9	Gjakovë	FMC 6 Ponoshec	FMC					
10	Gjakovë	FMC 9 Rogove	FMC					
11	Gllogoc/Drenas	MFMC - "Dr.Hafir Shala" Drenas	MFMC					
12	Gllogoc/Drenas	FMC-Terstenik	FMC					
13	Gllogoc/Drenas	FMC-Komoran	FMC					
14	Graqanica*	Health Centre Gracanica	PHC Center					
15	Gracanica*	Health Centre Gusterica	PHC Center					
16	lstog	MFMC	MFMC					
17	lstog	FMC	FMC					
18	Junik	MFMC " Dr Ali Hoxha" Junik	MFMC					
19	Kamenica	MFMC Dardanë	MFMC					
20	Kamenica	FMC	FMC					
21	Klinë	MFMC Klinë	MFMC					
22	Klinë	FMC	FMC					
23	Lipjan	MFMC-Lipjan	MFMC					
24	Lipjan	FMa -Kraishte	FMA					
25	Lipjan	FMC -Gadime	FMC					
26	Lipjan	FMC -Magurë	FMC					
27	Lipjan	FMC -Janjevë	FMC					
28	Malishevë	MFMC - "Dr.Shpëtim Robaj" Malishevë	MFMC					

No.	Municipality	Name of facility	Type of facility
29	Malishevë	FMC Bellanicë	FMC
30	Malishevë	FMC Drenovc	FMC
31	Mitrovicë	MFMC - "Dr.Nexhat Çuni " Mitrovicë	MFMC
32	Mitrovicë	FMC "Ura e Gjakut"	FMC
33	Mitrovicë	FMC "Ilirida"	FMC
34	Mitrovicë	FMC "Bair"	FMC
35	Mitrovicë	FMC "Tuneli i Parë"	FMC
36	Mitrovicë	FMC "Shupkovc"	FMC
37	Novo Brdo*	Ambulanta Novo Brdo	PHC Center
38	Novo Brdo*	FMC Llabjan	PHC Center
39	Obiliq	MFMC - Obiliq	MFMC
40	Obiliq	FMC Millosheve	FMC
41	Peja	MFMC Peja	MFMC
42	Peja	FMC IV	FMC
43	Peja	FMC	FMC
44	Rahovec	MFMC Dr.Fahredin Hoti"	MFMC
45	Rahovec	FMC	FMC
46	Rahovec	FMC	FMC
47	Skenderaj	MFMC- Skenderaj	MFMC
48	Skenderaj	FMC-1	FMC
49	Skenderaj	FMC-3	FMC
50	Vushtrri	MFMC- Vushtrri	MFMC
51	Vushtrri	FMC- 1	FMC
52	Vushtrri	FMC - Lumi i Madh	FMC
53	Ranilug*	Ambulanta Ranilug	PHC Center
54	Shtime	MFMC - Shtime	MFMC
55	Shtime	FMC -Muzeqinë	FMC

*Serbian-speaking municipalities

3.4.2 Sampling of providers for providerclient observations

The inclusion criteria for doctors for doctorpatient observations were:

- Working in one of the selected health facilities for at least 3 years or have been exposed to AQH interventions previously;
- Medical doctors that are providing primary health care services;
- Ability and willingness of the doctor to participate and provide written informed consent; and
- Ability and willingness of the patient 18 years or older (or her/his's legal representative for patients younger than 18 years) to participate and provide written informed consent.

The doctors to be observed were selected randomly. In case, there was more than one doctor fulfilling the eligibility criteria, the respondent/participant doctor was randomly selected.

All doctor-patient consultations occuring during data collection in a health facility (i.e. one day) were observed, depending on the capacity of the data collectors. Thus, the same doctor was observed repeatedly.

3.4.3 Sampling of patients for exit interviews

Inclusion criteria for patients receiving a consultation and exiting a health facility were:

- Being a patient 18 years or older receiving • a consultation from a health care provider (doctor, nurse, midwife) in one of the selected health facilities;
- Being a patient younger than 18 years accompanied by a legal representative (e.g. mother/father/caretaker) receiving a consultation from a health care provider

(doctor, nurse, midwife) in one of the selected health facilities;

• Ability and willingness of the patient (or her/ his's legal representative in case of patients <18 years of age) to participate and provide written informed consent.

For the exit interviews, all patients that received care at the facility on the day of data collection in a health facility were invited to participate in the study, depending on the capacity of the data collectors. The patients for exit interviews could be but do not necessarily had to be the same as for the doctor-patient observation.

3.5 Questionnaire tools

The survey included three questionnaires that assess the three different dimensions of QoC.

The questionnaires for the 2023 survey were largely identical to the baseline and midline surveys in 2016 and 2018. These were generally based on previous studies on QoC in Tajikistan, in Chad and in Albania [4, 6]. All studies considered a mix of indicators from WHO Service Availability and Readiness Assessment (SARA) and the "Tool to Improve Quality of Health Care" within the "ACCESS" program supported by the Novartis Foundation for Sustainable Development (2014) [7, 8]. The modules were adapted to the Kosovo local context thereby taking into consideration the national PHC norms or, where these are unavailable, the WHO norms established in the Package of Essential NCD Interventions.

The full survey tools are shown in Annex 1 (available in English, Albanian and Serbian). The following table gives an overview on the different dimensions of QoC covered in the survey tools.

TABLE 6: Topics covered in the survey tools

Din

nension	Sub-dimension/ operationalization	Level of data collection
ructure: Infrastructure		
lity infrastructure, overall cleanli- s and maintenance	 Facility – overall cleanliness (facility, yard, waiting area) Facility – maintenance of floors and walls (painted, cracks) Water – general availability of water Practice room – water and soap, privacy of examination Availability of electricity, heating, telecommunications 	Health facilities
iene and safety standards	Toilets availability, water, soap, cleanliness	Health facilities
ic/essential medical equipment supplies	 Availability and functionality of medical equipment and supplies (according to Basic Service Package) 	Health facilities
ects of accountability	Public display of key information (opening hours, tariffs, contact, complaint box)	Health facilities
ilability of guidelines and health notion material	Relevant guidelines and health promotion material is available at the facility and can be easily retrieved	Health facilities
lability of consumables	 Availability and quantity of consumables (according to Updated list of Medications and Consumables, 12.06. 2018)) 	Health facilities
ocesses: Doctor-patient	tinteraction	
eral aspects on adherence on ciples of clinical history and sical examination	 Makes a patient comfortable, e.g. greeting, seat offered Interaction and welcoming Privacy Relevant explanations are given 	Provider; all patients
lication of infection prevention control measures	Hand-washing practicesProcedures for disinfection	Provider; all patients
ervations on management of ents with arterial hypertension diabetes	Anamnesis Asks questions relevant for the illness Physical examination Conducts relevant physical examinations correctly Explanations Gives relevant and comprehensive explanations 	Provider; patients with known/ or newly diagnosed arterial hypertension and diabetes
tcomes: Exit interviews	for patient satisfaction	
sfaction with privacy		All patients
sfaction with doctor-patient ractions	Respectful treatmentDoctors' communication and explanations	All patients
sfaction with the quality of the ity	 Secrecy of medical and personal information Ability to choose doctor Prompt attention Decision involvement in healing options Clean surroundings 	All patients
io-demographic and economic ects	 Socio-demographic aspects Beneficiary from public social program Insurance situation 	All patients

Structure: Infrastructure		
Facility infrastructure, overall cleanli- ness and maintenance	 Facility – overall cleanliness (facility, yard, waiting area) Facility – maintenance of floors and walls (painted, cracks) Water – general availability of water Practice room – water and soap, privacy of examination Availability of electricity, heating, telecommunications 	Health facilities
Hygiene and safety standards	• Toilets availability, water, soap, cleanliness	Health facilities
Basic/essential medical equipment and supplies	 Availability and functionality of medical equipment and supplies (according to Basic Service Package) 	Health facilities
Aspects of accountability	 Public display of key information (opening hours, tariffs, contact, complaint box) 	Health facilities
Availability of guidelines and health promotion material	 Relevant guidelines and health promotion material is available at the facility and can be easily retrieved 	Health facilities
Availability of consumables	 Availability and quantity of consumables (according to Updated list of Medications and Consumables, 12.06. 2018)) 	Health facilities
Processes: Doctor-patient	interaction	
General aspects on adherence on principles of clinical history and physical examination	 Makes a patient comfortable, e.g. greeting, seat offered Interaction and welcoming Privacy Relevant explanations are given 	Provider; all patients
Application of infection prevention and control measures	Hand-washing practicesProcedures for disinfection	Provider; all patients
Observations on management of patients with arterial hypertension and diabetes	Anamnesis Asks questions relevant for the illness Physical examination Conducts relevant physical examinations correctly Explanations Gives relevant and comprehensive explanations 	Provider; patients with known/ or newly diagnosed arterial hypertension and diabetes
Outcomes: Exit interviews	for patient satisfaction	
Satisfaction with privacy		All patients
Satisfaction with doctor-patient interactions	 Respectful treatment Doctors' communication and explanations 	All patients
Satisfaction with the quality of the facility	 Secrecy of medical and personal information Ability to choose doctor Prompt attention Decision involvement in healing options Clean surroundings 	All patients
Socio-demographic and economic aspects	 Socio-demographic aspects Beneficiary from public social program Insurance situation 	All patients

For the observations of the doctor-patient interactions as well as the exit interviews, the tools had three disease-specific blocks depending on the patient's disease:

- Patients with diabetes; •
- Patients with hypertension;
- Patients with a condition other than diabetes • or hypertension (referred to as 'other disease').

3.6 Data management and analysis

Once data was transferred to the server of the Swiss TPH regular data checks was conducted for quality assurance. Completeness and the logical structure of the obtained questionnaires was checked regularly. Feedback from the analysis was immediately given to the study coordinator.

Data was analysed using Stata Statistical Software and R statistical software.

For each domain (infrastructure, clinical consultation and exit interview), an overall score was calculated where the denominator was 'total number of questions' and the nominator was 'number of correctly answered questions'. The latter could refer to availability and/or functionality of infrastructure, equipment or drugs in the infrastructure assessment; correct behaviours of the doctors according to good practice and protocols for the doctor-patient observations; and satisfying/positive answers with regards to quality of care from the exiting patients in the exit interviews.

In addition, summary scores of sub-categories within the different domains (see Table 6 above) were calculated using the same approach.

Scores are typically stratified per municipality and year.

3.7 Ethical considerations & clearance

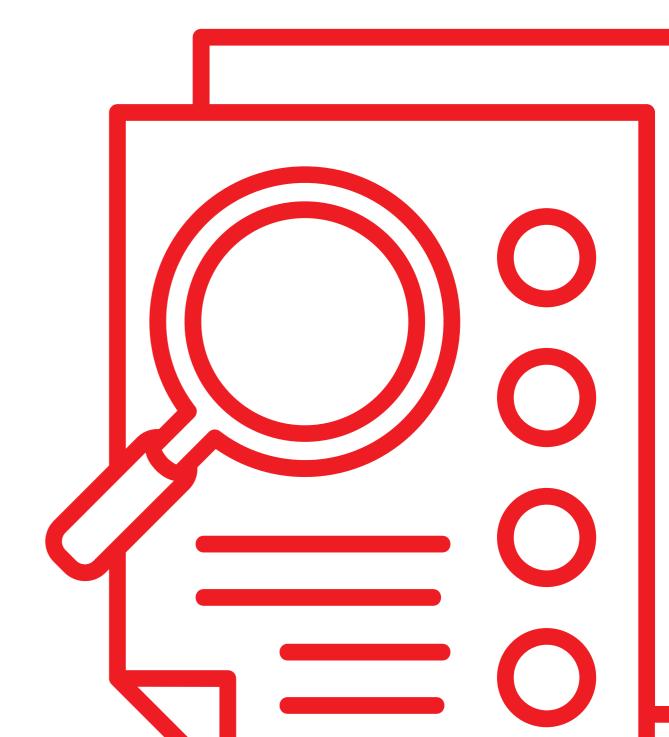
Ethical approval for this study was sought from the Kosovo Doctors Chamber (Ref No. 66/2023, date. 24.04.2023).

Before data collection relevant authorities, specifically the Municipal Department of Health and Social Welfare (DHSW) of 20 project municipalities were informed about the study by MoH Division of PHC, its purpose and when the data collection will take place. Contacts with DHSW were established through the study coordinator from AQH. The DHSW directorate managers in turn informed the selected health facilities on the survey.

The ethical approval letter is shown in Annex 1.

All the study participants were given detailed information about the purpose and the activities of the study as well as the extent of their involvement. Importantly, participants were informed that (a) their participation is voluntary, (b) they can withdraw from participation at any time, (c) non-participation will not have any negative effects. Informed consent was obtained from all the participants and parents/legal guardians.

Findings





4.1 Overall assessment of municipalities

apparent that municipality specific aspects dominate, with several improvements but also some aspects that have rather declined.

Table 7 provides an overview on the overall scores per municipality for each domain (infrastructure, clinical consultation and exit interview). It is

TABLE 7: Overall scores of municipalities in Kosovo (2016, 2018, 2023)

Municipalities	No of facilities	Infras	tructure (%)	Score		al Consu Score (%		Exit Interview S (%)		Score
		2016	2018	2023	2016	2018	2023	2016	2018	2023
Decan	2	n/a	49	67	n/a	41	63	n/a	95	82
Fushë Kosovë	3	61	64	75	74	70	69	98	84	73
Gjakovë	5	67	62	70	80	46	72	95	89	75
Gllogovc/Drenas	3	53	55	72	62	63	70	95	91	80
Gracanica*	3 (2)	70	65	71	58	55	n/a*	89	79	74
Istog	2	n/a	65	70	n/a	78	64	n/a	97	86
Junik	1	62	61	76	73	42	77	96	88	89
Kamenica	2	n/a	62	72	n/a	79	76	n/a	93	91
Klinë	1	n/a	56	75	n/a	79	65	n/a	92	96
Lipjan	5	44	49	67	59	70	82	91	86	89
Malishevë	3	44	53	58	54	63	34	83	91	83
Mitrovicë	6	54	64	68	75	81	86	97	87	81
Novo Brdo	2	n/a	60	55	n/a	75	64	n/a	77	97
Obiliq	2	59	63	66	71	83	76	97	85	96
Peja	3	n/a	62	66	n/a	72	75	n/a	94	90

Municipalities	No of facilities	Infras	tructure (%)	Score		al Consu Score (%		Exit Ir	nterview (%)	Score
		2016	2018	2023	2016	2018	2023	2016	2018	2023
Rahovec	3	58	62	71	70	52	62	95	93	86
Ranilug	1	n/a	60	62	n/a	75	69	n/a	86	87
Shtime	2	n/a	60	68	n/a	74	74	n/a	89	93
Skenderaj	3	52	57	66	62	80	72	93	94	91
Vushtrri	3	60	55	79	65	59	82	97	74	82
Overall	55	55.5	58.6	68.0	61.8	67.1	69.6	92.5	88.8	83.1

*Upon request, in 2023, only facility infrastructure was assessed and exit interviews were performed.

Key findings on overall scores by domain

- Exit interviews: With few exceptions, the trend from the exit interviews is mostly negative. In (see also 3.6): six municipalities, the decrease from 2018 to • Infrastructure assessment: In all municipalities 2023 is statistically significant while only Novo except Novo Brdo the overall infrastructure Brdo has a significant positive increase. The score increased between 2018 and 2023. overall negative trend in patient satisfaction Looking at changes the 12 municipalities that can be attributable to the intense efforts of were included from 2016 on, the score increased MoH with the support of AQH in patient rights awareness rising with the intensified national in all of them between 2016 and 2023, but four experienced a slight dip at the intermediary annual campaigns since 2017. In addition, the implementation of Community Score Cards survey in 2018. In its two phases, AQH had supported all municipalities with infrastructure in each Municipality on questions related to investments and basic medical equipment at quality health care might also have resulted in a MFMC and FMC level. more critical appreciation of patients on health services in municipalities.
- Doctor-patient observations: Results from the clinical observations show a very diverse picture. Many municipalities show increasing overall score trends but there are several municipalities where the score has decreased either from 2018 to 2023 or overall, which could be a result of a general shortage of medical staff at facility level, a high turn-over of staff including the new posting of young doctors (e.g. Malisheve).

Figure 2 shows the summary scores for each domain for each municipalities.

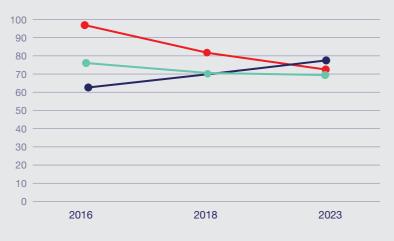
FIGURE 2: Infrastructure, clinical consultation and exit interview scores per municipality for each data collection phase (2016, 2018, 2023)

Exit Interview Score (%) Infrastructure Score (%) Clinical Consultation Score (%)



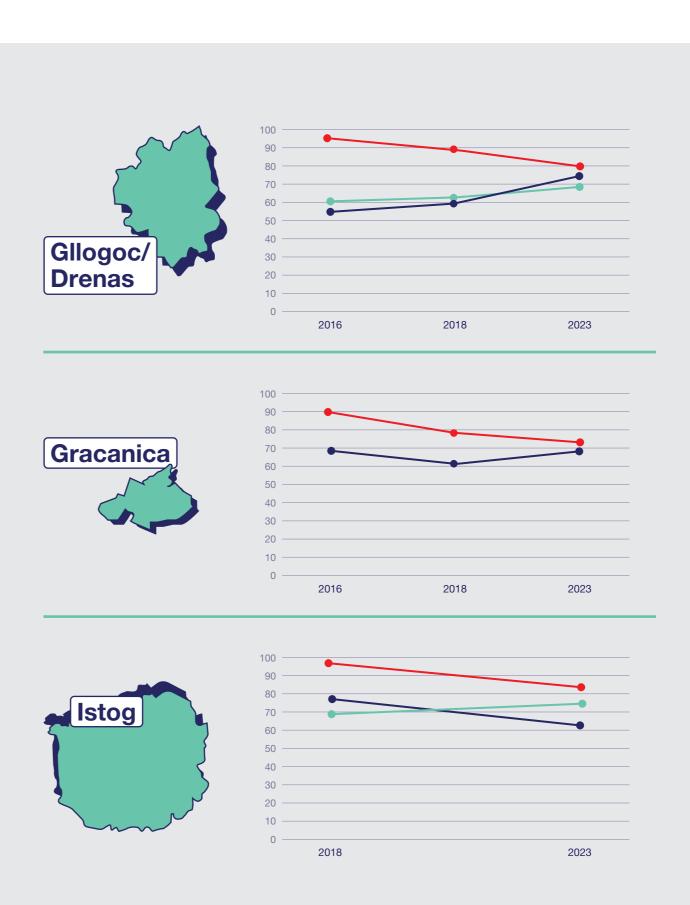














Clinical Consultation Score (%)



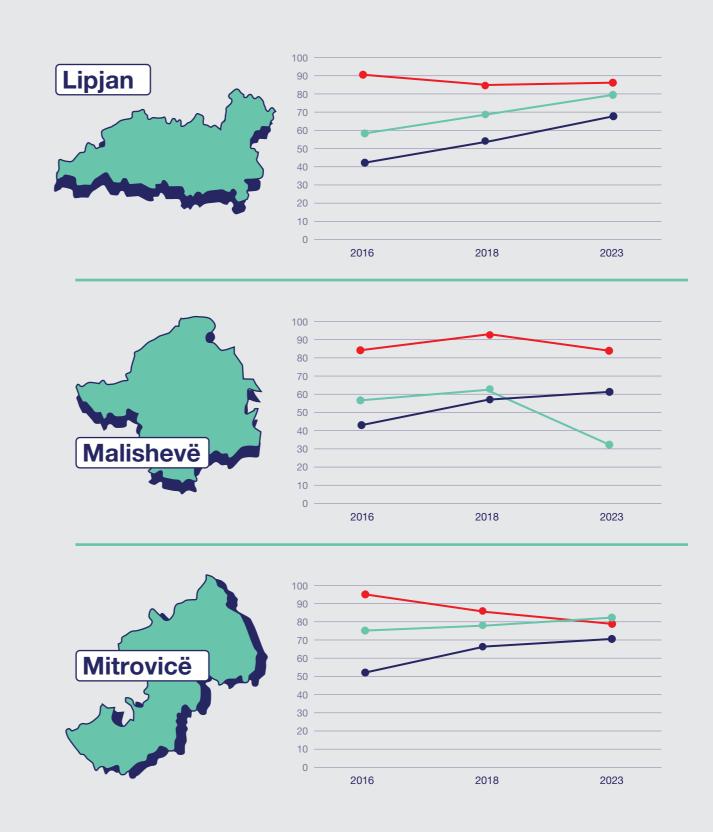












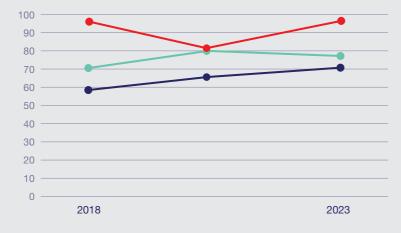
Exit Interview Score (%) Infrastructure Score (%)

Clinical Consultation Score (%)



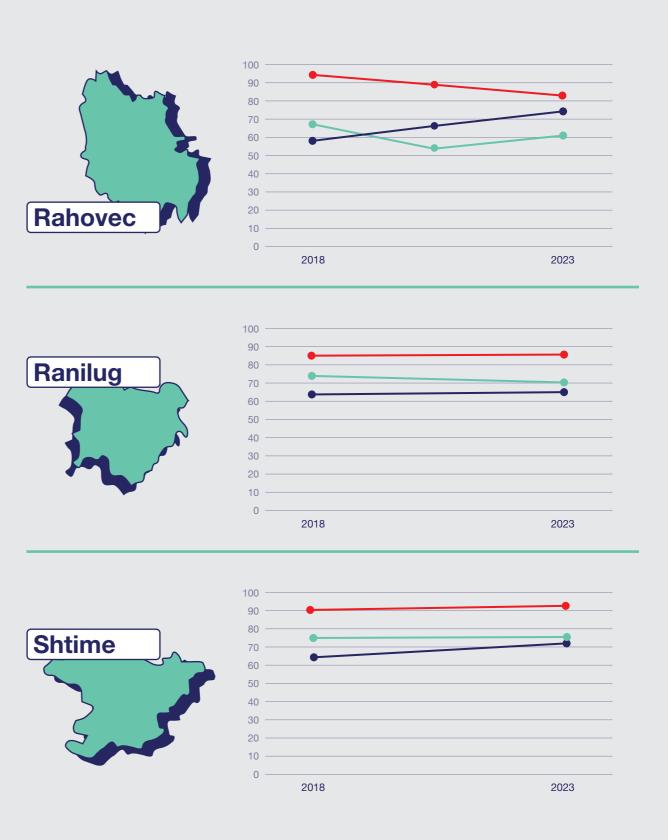


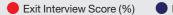






















4.2 Infrastructure

The following Table 8 and graphs in Figure 2 show the achieved scores for 2016, 2018 and 2023 in all municipalities from the infrastructure interviews. The overall trend is positive in almost all municipalities with values ranging from 49 (Lipjan) to 65 (Graçanicë) in 2018 and from 55 (NovoBrdo) to 79 (Vushtrri) in 2023. As in 2018, values in MFMCs are higher in 2023 compared to FMCs.

TABLE 8: Infrastructure scores by facility type (2016, 2018, 2023)

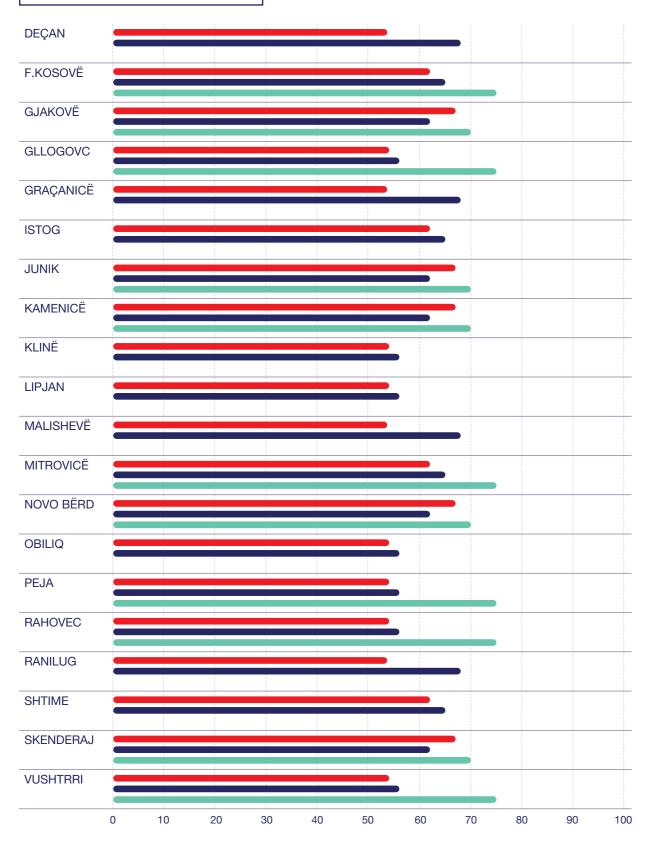
		MFMC FMC (mean, range) (mean, range)				
	2016 (n=11)	2018 (n=19)	2023 (n=18)	2016 (n=11)	2018 (n=35)	2023 (n=34
Overall infrastructure	71	70	80	51	60	69
	(48-90)	(59-86)	(59-89)	(32-72)	(39-75)	(51-88)
Facility Infrastructure &	88	85	90	64	62	74
Cleanliness	(80-100)	(67-100)	(71-100)	(40-95)	(30-95)	(50-100)
Hygiene	83	79	92	73	68	93
	(61-100)	(33-100)	(67-100)	(31-100)	(33-100)	(78-100)
Public Accountability ¹	83	87	89	64	71	66
-	(45-100)	(36-100)	(45-100)	(18-91)	(18-100)	(9-100)
Guidelines & Material	89	68	89	49	56	78
	(60-100)	(20-100)	(20-100)	(0-100)	(0-100)	(20-100)
General Medical Equipment	69	65	82	45	60	72
	(41-97)	(26-97)	(55-92)	(0-84)	(24-82)	(42-89)
Availability of Medicines	69	61	65	55	53	54
	(29-100)	(36-80)	(39-82)	(44-69)	(36-71)	(30-73)

It is important to note that observed differences are influenced by a variety of factors, including the general health politics, the facility situation at the day of the survey, AQH investments, other project-based investments and methodological aspects.

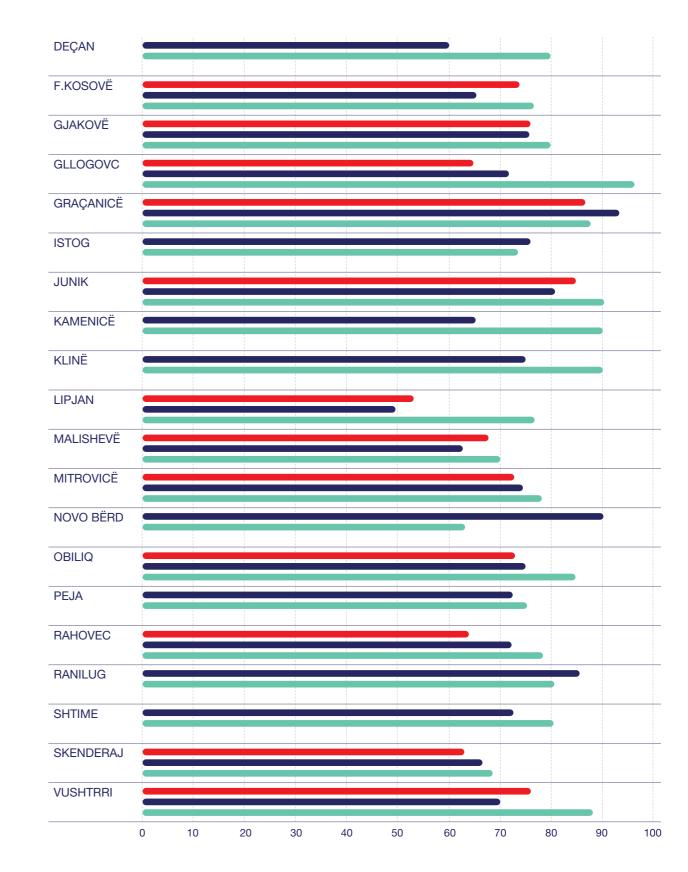
FIGURE 3: Infrastructure scores by municipality (2016, 2018, 2023)



OVERALL INFRASTRUCTURE



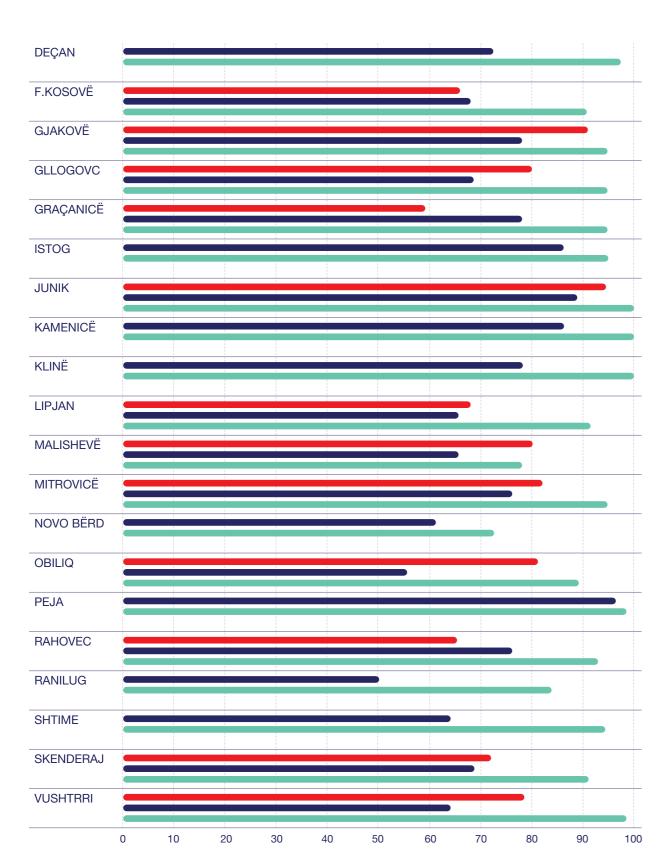




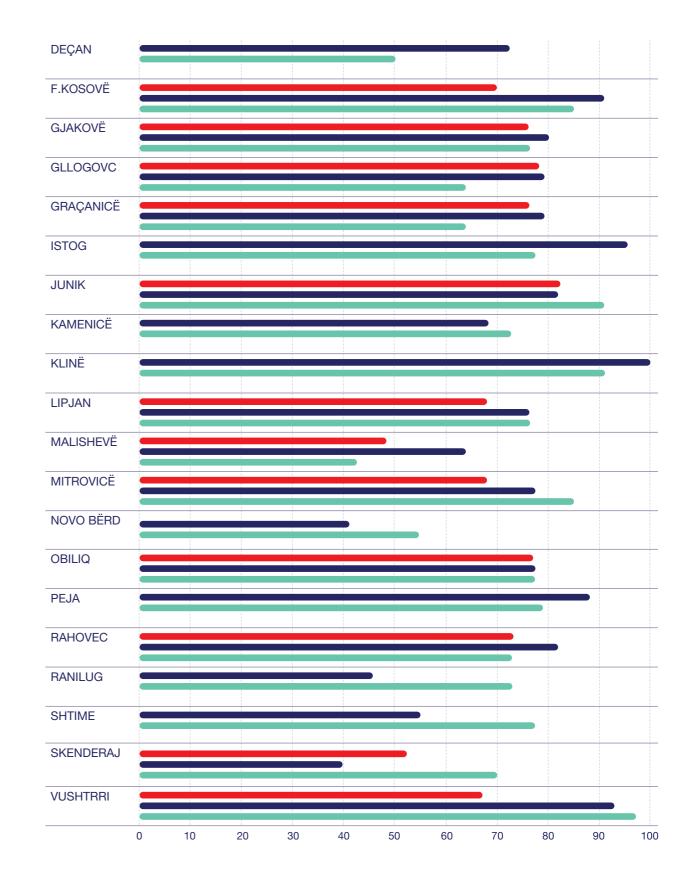
ASSESSMENT OF THE QUALITY OF CARE IN PRIMARY HEALTH CARE FACILITIES

HYGIENE





PUBLIC ACCOUNTABILITY















Key findings:

- The overall infrastructure score in MFMCs has remained stable between 2016 (71) and 2018 (70), but has increased to 80 in 2023. In FMCs, there was a steady increase over the surveyed years from 51 in 2015, to 60 in 2018, to 69 in 2023.
- Regarding facility infrastructure and cleanliness, trends are mostly positive and values generally quite high.
- Hygiene standards have dramatically increased overall. Interestingly, they were higher in 2016 than 2018, but improved then again in 2023. This may be related to AQH support in maintenance corners, and the training module on infection prevention and control measures offered by the AQH project since 2017 as well as an after effect of COVID-19.
- Public accountability¹ had various results depending on the items assessed. In regards to visibility of the contact phone number displayed to the public, there was an increase from 33 (2016) to 50 (2023). In addition there was an increase from 46 (2016) to 87 (2023) on the availability at the facility of the information leaflets about the Ministry of Health helpline for citizens' complaints. Whereas for display of posters from pharmaceutical companies there was a decrease from 80 (2016) to 17 (2023).
- The availability of guidelines and material has improved in most municipalities and is very high in some of them. This high trend could be attributed to the support of AQH to the Ministry of Health in developing CPG and in supporting municipalities with the provision of material and training.

- Through the support of AQH, the availability of general medical equipment has improved in most municipalities over the survey years.
- The availability of medicines has worsened in about half of the municipalities and is rather low compared to other indicators. In addition, in MFMCs, the availability of medicines was lower in 2023 than in the 2016 baseline. AQH could not influence on the improvement of the availability of medicines since the project does not have the mandate to support this sector.

4.3 Clinical Observations

The following graphs display the achieved scores from the clinical observations for 2018 and 2023 in the 20 municipalities that were surveyed in both years (Figure 3). Findings are shown in five categories. Disease-specific results on patients with diabetes, hypertension and 'other illnesses' are further divided into sub-categories on whether the medical doctor asks questions about the illness (questions/anamnesis), conducts the examination appropriately (examination) and advices and explains results, diagnosis and further steps sufficiently (advice). The results on the subcategories are shown for the entire study population (Figure 4). Taken together, they form the 'overall' score on clinical observations.

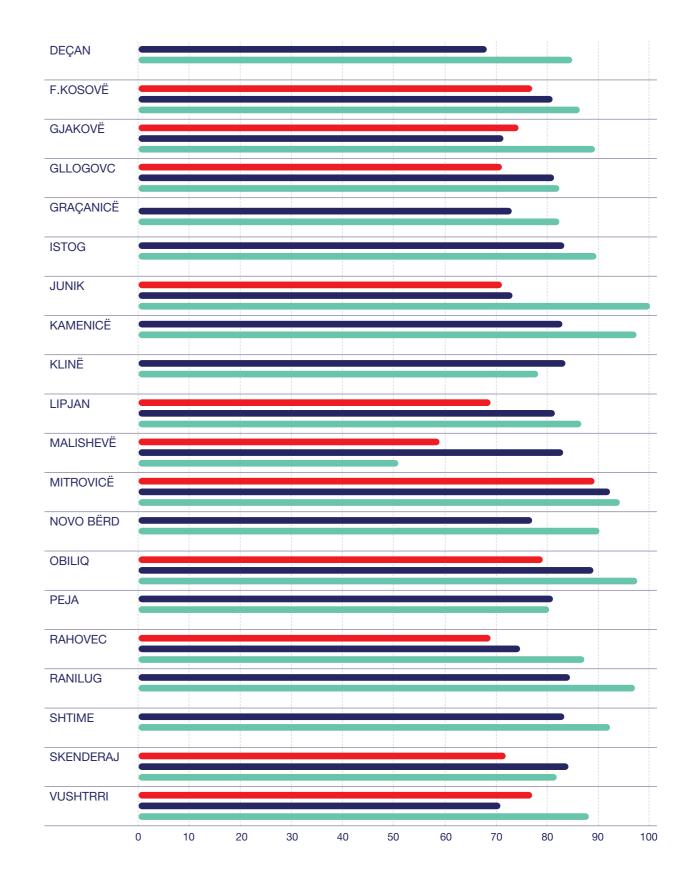
¹ Measured through indicators such as accessibility of complaint mechanisms, visible display of the Charter of Patient's Rights and Responsibilities, display of posters from pharmaceutical companies

FIGURE 4: Clinical observation scores by municipality (2016, 2018, 2023)

2018 2023 **INFECTION PREVENTION AND CONTROL** DEÇAN F.KOSOVË GJAKOVË GLLOGOVC ISTOG JUNIK KAMENICË KLINË LIPJAN MALISHEVË MITROVICË NOVO BËRD OBILIQ PEJA RAHOVEC RANILUG SHTIME SKENDERAJ VUSHTRRI

2016

DOCTORS KNOWLEDGE AND COMPLIANCE



0

10

30

20

40

50

60

70

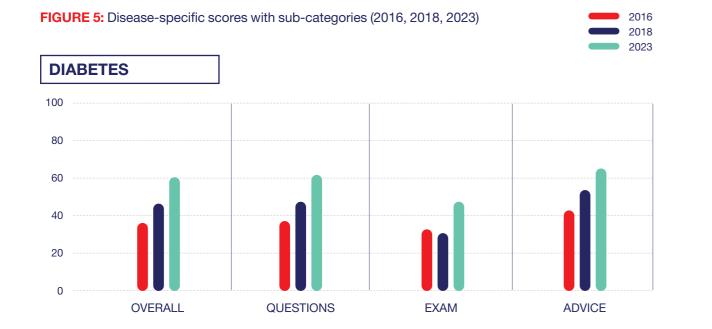
80

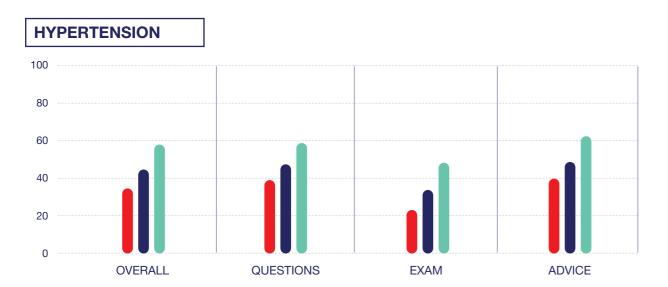
90

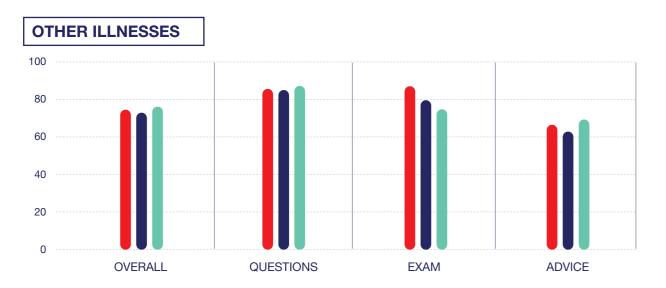
100

ASSESSMENT OF THE QUALITY OF CARE IN PRIMARY HEALTH CARE FACILITIES









As mentioned above, 'other illnesses' refers to patients with illnesses other than diabetes and hypertension.

Key findings:

- Results on the doctor's knowledge and compliance with principles of clinical history and physical examination show significant increases in almost all municipalities. Only in Malishevë a substantial decrease from 83 to 52 can be observed. The overall increase in compliance with clinical guidelines can be attributed to the AQH support to MoH on the trainings and roll-out of CPGs for treatment of diabetes and hypertension.
- When it comes to the doctor's adherence to infection prevention and control measures, values have significantly increased in 14 municipalities but remain low in many of them. The increase in adherence to handwashing practices might be related to COVID-19 hygiene measures, and the AQH supported continuous medical education on infection prevention.
- Regarding diabetes, the overall score (including the anamnesis, examination and advice) has increased by 30%. The strongest increase was observed in how the doctors perform the examination (52%). However, the overall number of patients observed is relatively low (n=81).
- The hypertension score increased by 29% with the largest increase also in the examination sub-score (41%) (n=242). The positive trends in adherence to guidelines related to diabetes and hypertension can be attributed to the support of AQH to municipal partners.
- The score on other illnesses (than diabetes or hypertension) increased by 4%. The examination sub-score decreased by 6% but the sample in this sub-category are lower than in the other sub-categories and the overall sample (n=1462 vs. n=1727).

4.4 Exit Interviews

In 2023, 948 exit interviews were conducted, compared to 629 in 2018 and 716 in 2016. In 2023, 33% have reported to not have visited the health center in the 3 months preceding the survey, thus similar to 2018 (33%) and higher than in 2016 (21%).

The main results on the overall satisfaction of patients exiting the facility were:

- Across municipalities, patients were mostly satisfied or very satisfied with the health services. In comparison to 2018, the ratio of very satisfied patients vs. satisfied patients increased in 2023.
- The overall patients service score significantly decreased in seven municipalities (F. Kosove, Gjakove, Gllogovc/Drenas, Malisheve, Rahovec, Decan, Istoq A significant positive change could only be observed in Novo Brdo.

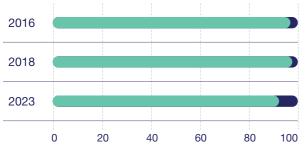
Figure 6 displays eight different indicators on doctor's behaviours' during the consultation from the patients' perspectives and their evolution over the surveyed years. The following results stand out when comparing over the years:

- The patients largely reported overall 'positive/ skilled' behaviours of the doctors (green colour), as in 2022, approval rates for the behaviours considered 'as should' are all 60% and above, with one exception (see following point).
- The most significant (negative) change was observed regarding the explanation of the intake of prescribed medicines (-47.6%). Another marked negative change was the explanations given by the doctor regarding the questioning and physical examination (-15.9% between 2018 and 2023).
- Improvements between 2018 and 2023 were observed for "doctor asking on current (other) prescriptions" and "patient was given chance to ask questions".
- The politeness of the medical doctors' showed a slight negative trend over the surveyed years.

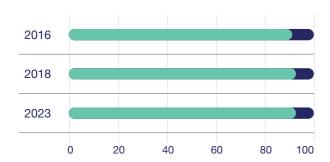
FIGURE 6: Indicators on doctor's behaviours' during the consultation (2016, 2018, 2023)

```
YES
   NO
```

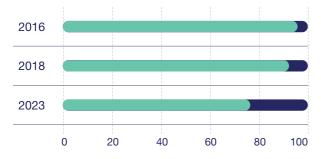
At the beginning of the consultation, were you given the opportunity to explain your health problem?



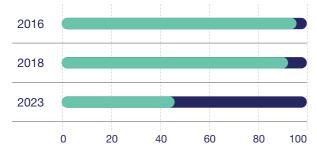
During your visit today, did the medical doctor ensure your privacy?



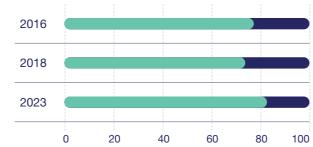
Did the medical doctor explain the questioning and physical examinations and your health problem?



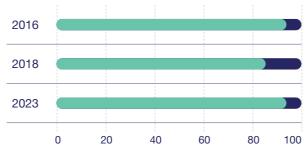
Did the medical doctor clearly explain the intake of prescribed medicines to you?



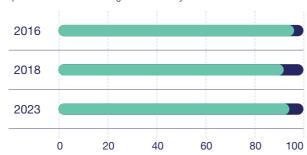
Did the medical doctor ask if you are currently taking any (other) prescriptions?



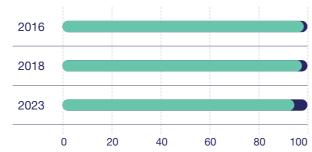




Did the medical doctor listen carefully to your concerns and questions and did he/she give satisfactory answers?



Was the medical doctor polite in general during consultation?



Looking in more detail at the various aspects regarding the consultation that have been reported by exiting patients we identified the following

TABLE 9: Overview on significant changes in patients exiting facilities between 2018 and 2023 at municipality level

Municipality	Positive Changes	Negative Changes
Gjakovë	n/a as no data was collected in 2023	 n/a as no data was collected in 2023
Gllogovc/Drenas	Patient got advice on health problem	Doctor did not explain the intake of prescribed medicine
		 Doctor did not ask if patient currently takes pre- scriptions
Gracanica	Patient got advice on health problem	 Doctor did not explain the intake of prescribed medicine
		Medical doctor was not polite during consultation
Mitrovicë	 Patient was given chance to ask questions about the investigation, health problem and treatment 	 Patient was not given the opportunity to explain the health problem
	 Doctor listened carefully to patients concerns and questions and gave satisfactory answer 	 Doctor did not explain the intake of prescribed medicine
Junik		 Doctor did not explain the intake of prescribed medicine
Lipjan	 Doctor asked if patient currently takes prescriptions 	 Patient was not given the opportunity to explain the health problem
	 Patient was given chance to ask questions about the investigation, health problem and treatment 	
	Patient got advice on health problem	
Malishevë	 Patient was given chance to ask questions about the investigation, health problem and treatment 	 Doctor did not explain the questioning and physical examinations and the health problem
	 Doctor listened carefully to patients concerns and questions and gave satisfactory answer 	 Doctor did not explain the intake of prescribed medicine
	Patient got advice on health problem	 Doctor did not ask if patient currently takes pre- scriptions
Obiliq	Patient was given chance to ask questions about the investigation, health problem and treatment	
Fushë Kosovë	Patient got advice on health problem	 Doctor did not explain the questioning and physic examinations and the health problem
		 Doctor did not explain the intake of prescribed medicine
Rahovec		Doctor did not explain the intake of prescribed medicine



positive and negative changes between 2018 and 2023 in the different facilities (see Table 9).

Municipality	Positive Changes	Negative Changes	
Skenderaj	Doctor asked if patient currently takes prescriptions	 Doctor did not explain the questioning and physica examinations and the health problem 	
		 Doctor did not explain the intake of prescribed medicine 	
Vushtrri	Patient's privacy was ensured	Doctor did not explain the intake of prescribed	
	Doctor asked if patient currently takes prescriptions	medicine	
	 Patient was given chance to ask questions about the investigation, health problem and treatment 		
	 Doctor listened carefully to patients concerns and questions and gave satisfactory answer 		
	Patient got advice on health problem		
	Medical doctor was polite during consultation		
Kamenica		Doctor did not explain the questioning and physical examinations and the health problem	
		 Doctor did not explain the intake of prescribed medicine 	
Decan	Patient's privacy was ensured	Doctor did not explain the intake of prescribed	
	 Patient got advice on health problem 	medicine	
Istog		Doctor did not explain the questioning and physical examinations and the health problem	
		 Doctor did not explain the intake of prescribed medicine 	
Klinë			
Peja	Patient got advice on health problem		
Shtime	Patient got advice on health problem		
Novo Brdo	Doctor asked if patient currently takes prescriptions		
Ranilug			

5. Conclusion





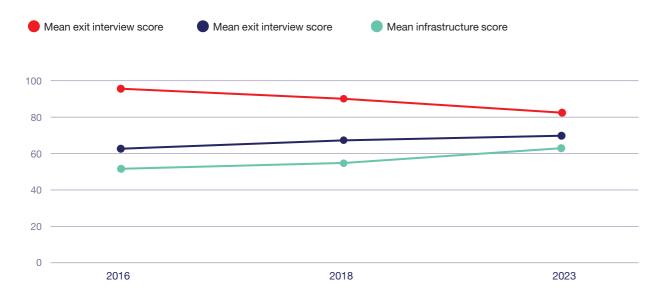


The mean overall scores for each dimensions of QoC by year and by region are summarized in Figure 38.

Importantly, the indicators included to calculate the overall scores might slightly vary between

the years as some questions/indicators had to be adjusted, updated, removed or added. Nonetheless, the overall scores do reflect the status of the three dimensions against the standard of care in any given survey year.

FIGURE 7: Mean overall scores by year



Quality of the HC infrastructure measured through a health centre assessment tool (structural attributes):

• The infrastructure score showed slight improvement between 2016 and 2018 and then a marked improvement between 2018 and 2023. This improvement in infrastructure can be attributed to AQH project interventions including: provision of basic medical equipment, refurbishment of PHC centers, as well as renovation of PHC centers through Quality Improvement Projects (QIPs).

Quality of doctor-patient interactions measured through doctor-patient observations (process attributes):

• The quality of the doctor-patient interaction increased slightly but steadily increased over 2016, 2018 and 2023. This steady increase could be due to the fact that AQH project in collaboration with MoH organized continuous trainings on the management of diabetes and hypertension and encouraged the implementation of CPGs among primary healthcare providers.

Patient satisfaction measured by exit interviews after consultation (outcome attributes):

• The patient satisfaction score has decreased significantly over the years. This decrease could be due to increased knowledge about quality healthcare services among the PHC users. Since 2016, AQH project in collaboration with national stakeholders have developed several initiatives to improve population knowledge on disease risks as well as empower to demand the right to quality services.

Recommendations

Overall the findings of this 2023 survey reveal dimensions or topics of the current Quality of Care in Primary Health Care facilities, that would benefit from further investments, interventions, or

Table 10: Overview of key findings and recommendations

Key findings	Recomr for 2024
Infrastructure	
 Frequent power-cuts and only half of the surveyed facilities had a generator Functional heating systems unavailable in 2/3 of the facilities Frequent water supply shortages / 18% of facilities do not have access to tap water 	The key find also been of • Ensure the according
 Variation in the range of equipment available at facilities Basic equipment not available in some facilities 	The equipme assess and more variable
 Lack of standards for some categories of equipment (e.g. gynaecological equipment) Lack of equipment to assess and monitor child growth 	 Revise equipmen Identify materi Provide Elabora ment,

2

reinforcement. The following Table 10 indicates remaining key findings since 2016 through to 2018 and 2023, and provides recommendations for 2024 and beyond.

mendation(s) and Relevance and beyond

dings and recommendation remain, though structural improvements have observed.

he availability of basic amenities in PHC facilities (power, water, heating) a to national standards

nent situation has improved for most facilities. The lack of equipment to monitor child growth remains a main issue. The availability of drugs is ble in 2023 compared to 2016.

uipment standards for PHC and ensure provision and maintenance of nt²:

fy critical aspects that hinder the inadequate availability of the equipment, rial and drugs

de basic equipment

rate a step wise strategy/plan for health technology/equipment manageeventually addressing both levels PHC and SHC

Key findings	Recommendation(s) and Relevance for 2024 and beyond		
 Disinfectant for instruments often not available in the necessary places Washing points/soap not available near all toilets Cleanliness of toilets could be improved Storage and collection of infectious waste could be improved 	 Soap has been more available near all toilets in 2023 compared to 2916, but the cleanliness of the toilets have not improved across all municipalities. Progress has been identified for the storage of waste although the collection remains an issue. Ensure hygiene standards and enforce infection prevention and control measures: Functional washing points must be close to toilets Functional washing points must be in the consultation rooms Re-enforce "washing hands" protocol with periodic refreshment training for all professionals in PHC Include "washing hands" topic in health education measures for patients Ensure that water and soap are constantly available at all washing points Regular cleaning 		
Clinical consultations			
 Very low adherence to infection prevention and control measures during consultations 	 Hygiene practices and infection prevention remain a significant problem in clinical practice. Hence recommendations remain valid. Ensure hygiene standards and enforce infection prevention and control measures: Raise awareness and remind health staff on infection prevention measures Re-enforce "infection prevention and control" protocol with periodic refreshment training for all professionals in PHC 		
 Very low adherence to general diabetes treatment guidelines Very low adherence to general hypertension treatment guidelines Variable adherence to principles of good clinical practice and physical examination 	 Adherence to hypertension treatment has overall improved though it is still variable between municipalities & facilities. However, there is still sufficient space for further improvements. Review and revise relevant national CPGs, add new relevant CPGs including patient pathways Distribute relevant national CPGs to the health facilities and ensure online access Continue to train health professionals on CPGs Promote/implement existing relevant national CPGs, such as CPGs related clinical audits 		
Other observations			
 Feedback mechanism missing in 20% of facilities 	Feedback mechanisms have improved.Support the development of patient/provider interaction on quality of care, through feedback mechanisms		
Referral mechanisms could be improved	Finding and recommendation remains valid.		
	Support the referral of patients between levels of care		

7. References



Organization: Geneva.



Donabedian, A., The quality of care. How can it be assessed? JAMA, 1988. 260(12): p. 1743-8.

2 Donabedian, A., The seven pillars of quality. Arch Pathol Lab Med, 1990. 114(11): p. 1115-8.

Boller, C., et al., Quality and comparison of antenatal care in public and private providers in the

4 Matthys, B., Assessment of quality of care in primary health care facilities in two pilot rayons of project Sino. Study report. 2013, Swiss Tropical and Public Health Institute: Basel.

5 Levy, S. and S. Lemeshow, Sampling of populations. Methods and applications. 4 ed. 2008,

6 Lechthaler, F., Study Protocol on the Quality of Care Study in Chad. 2015, Swiss Tropical and

7 Novartis Foundation, Quality as the missing link between access to healthcare and improved

8 WHO, Service Availability and Readiness Assessment (SARA). 2011, World Health

Annexes

Annex 1: Ethical approval

Albanian (Original version)



Subjekti që implementon hulumtimin e lejuar sipas këtij akti të lejimit, është i obliguar që në afat prej 30 (tridhjetë) ditëve pas përfundimit të hulumtimit të dorëzojë raportin në formë të shkruar lidhur me hulumtimin e zbatuar sipas lejimit pranë Komisionit për Çështje Etike.

Faqe 1 nga 2

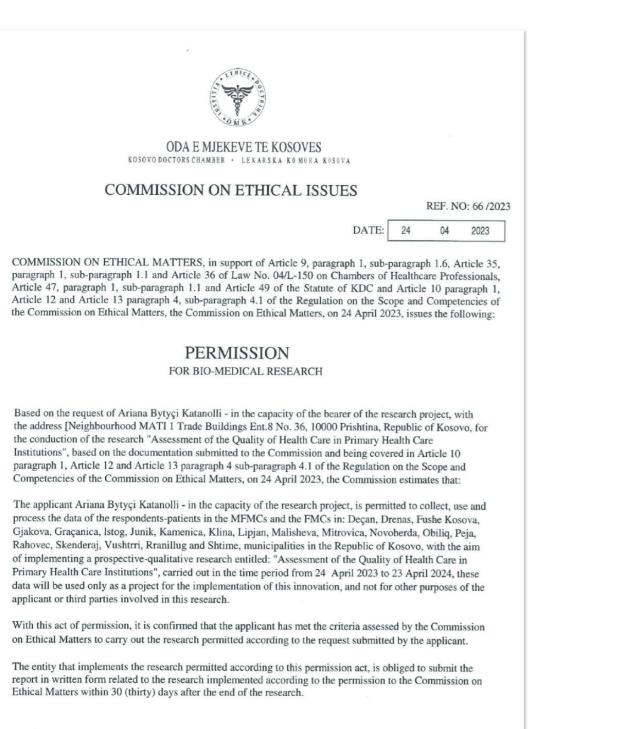
24 prill 2023

Këshillë juridike: Ndaj këtij akti, pala e pakënaqur mund të pa të tij. Ankesa duhet parashtruar përmes Komisionit për Çështje

Prishtinë

\cap	Kryetar i	Komisionit për Çështje Etik
(U)	rem	Prof.Dr. Shaip Krasnic
tu	51	
së në afat prej	15 (pesëmbëdh	jetë) ditëve nga dita pranin

Engl



tor nër Gjuhë Angle

Place	Date	Chairperson of the Commission on Ethical Matters
Prishtina	24 April 2023	Prof. dr. Shaip Krasniqi

the Governing Council of the OMC.