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Report on the Assessment of Quality of Care in Primary Health Care Facilities in the two Pilot Regions

Health for All Project – Albania (HAP)

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Abbreviations

CME	Continuous Medical Education
HAP	Health for All Project
HC	Health Centre
HIF	Health Information Fund
IPH	Institute of Public Health
MoHSP	Ministry of Health and Social Protection
ODK	Open Data Kit
PH directorate	Public Health directorate
PHC	Primary Health Care
QoC	Quality of Care
SARA	Service Availability and Readiness Assessment (SARA)
SCIH	Swiss Centre for International Health
SDC	Swiss Development Cooperation
SSV	Supportive supervision
Swiss TPH	Swiss Tropical and Public Health Institute

Executive summary

Background

The “Health for All Project” (HAP) in Albania shall increase the health of the population, by improving primary care services and increasing health promotion activities. The project, which is financed by the Swiss Agency for Development and Cooperation, is implemented in two pilot regions/qarks in Albania (Diber and Fier) since 2015. As the project approached its end of phase (2019) the aim was to assess the success and impact of the HAP project related to Quality of Care over the implementation period.

Methods

As during the baseline we carried out a cross-sectional study at 38 primary health facilities in urban and rural locations in Diber and Fier. The survey measures structural, process and outcome attributes thereby following the framework as laid out by Donabedian (1988, 1990). We assessed the infrastructure of the different facilities (structural attributes), provider-patient interactions through clinical observation (process attributes) and patient satisfaction as a proxy for outcome attributes. During clinical observations, special attention was given to diabetes and hypertensive patients. The questionnaires, sample, data collection principles and analysis remain to a vast extent identical to the baseline survey. Only were meanwhile regulatory updates have been introduced or where the project had implemented specific activities questions were updated/added.

Key results

The observed changes from base- to endline are overall positive. A number of improvements in respect to quality of care have taken place and Project HAP contributed within its mandate to these improvements.

The infrastructure situation shows substantial improvements regarding critical aspects identified in 2015 (see next table). Specific improvements are seen in the area of overall cleanliness, availability of basic equipment and transparency and public accountability. Also for clinical observations we observe improvements regarding the adherence of privacy and confidentiality during consultations.

Despite these achievements and progress several important challenges remain.

- Power cuts remain common and functional generators are not widely available. Heating systems are not common and running water out of the tap is not available in all facilities.
- Communication equipment continues to rely largely on private equipment of staff.
- Toilets for patients remain unavailable.
- Soap and disinfectants are often missing.
- Explicit referral or emergency mechanisms are still not widely available.
- Feedback mechanisms were typically not available.
- Guidelines and protocols are typically not available for use
- Several doctors did not keep essential equipment at facility (e.g. because of safety concerns) and/or kept only selective equipment as per their judgment with them.
- Gynaecological service equipment is not available for the majority of facilities.
- Equipment to assess and monitor child growth was generally missing.
- The availability of essential medicines remains variable.
- Infection prevention remains a concern and is widely not being adhered too.
- Physical examinations are – with the exception of measuring blood pressure – not routinely conducted.
- Habitual factors are typically still not being covered in clinical consultations.

Recommendations

Based on key findings the following general recommendations are:

- Ensure the availability of basic utilities in all facilities (power, water, heating), a functioning toilet for patients, functional washing points close to toilets, functional washing points in the consultation rooms, water and soap constantly available at all washing points, availability of chlorine solutions or other disinfectants for instruments.
- Try to ensure that at least one consulting room in each facility is 'child-friendly', including the equipment to assess and monitor child growth.
- Assist facilities to identify ways to store infectious and sharp waste safely at the facility until pick up for disposal in order to meet the the accreditation standards of PHC facilities
- Ensure availability and use of basic equipment, protocols and guidelines, at all facilities and for all PHC clinical personnel.
- Ensure each facility implements at least one patient/provider feedback mechanism and develop and implement either national or local referral mechanisms.
- Support effective implementation of the "*Manual for infectious prevention and control at PHC*" and monitor implementation.
- Provide refresher training for clinical staff on infection prevention and control
- Assess the situation of treatment guidelines for family doctors for common chronic conditions and – where missing – promote the development of a package of guidelines.
- Counselling on habitual risk factors should be integrated into all clinical consultations, by including health education counselling skills in the varied medical trainings and continuous medical education.

1 Background

1.1 The "Health for All" project

The "Health for All Project" (HAP) in Albania shall increase the health of the population, by improving primary care services and increasing health promotion activities. The two main expected outcomes of the project are:

- Central government, donors and other relevant actors' engagement in the health system reform leads to better management and provision of services through qualified health professionals
- Citizens in target regions have increased access to more decentralized, affordable, quality primary health services. More health-conscious citizens contribute through increased participation towards an accountable and responsive health system

The project, which is financed by the Swiss Agency for Development and Cooperation, is implemented in two pilot regions/qarks in Albania. The region in the north-east is called Diber and is a mountainous, rural area with mainly agricultural production. The second region, Fier, is located in the south-west of the country with sea access, oil industry and agriculture but still remains rural.

The project was implemented in 2015 and is now approaching the end of its current phase. To assess the success and impact of the HAP project over the implementation period, key indicators are compared at the end of this project phase against indicator values at the beginning of the project.

To inform the logframe two primary data collections were conducted at base- and endline: (1) a study on quality of care (QoC) and (2) a household survey.

This report summarises the findings of the endline and compares the findings with the baseline QoC study. The surveys were carried out at health facility level in April/May 2015 and July/August 2018 respectively.

1.2 Overview on Quality of Care

For the baseline and endline study we adopted an operational definition of the quality of health services based on the design of the QoC by Donabedian (1988, 1990), which was frequently used in similar studies (Boller, Wyss et al., 2003; Matthys, 2013). The quality of services and care is thereby characterized by three dimensions: structural attributes, the attributes associated with the process and attributes related to the outcomes. Thereby process attributes are often further sub-divided into technical and inter-personal dimensions.
The basic idea of the three-part approach 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.

Structural attributes refer to the setting where health care is provided. These attributes mostly refer to the organizational structure, human- and financial resources, and material. It may also include technical performance of practitioners.

Process attributes refer to what is done in giving and receiving care. These attributes comprise provider-client interaction, conduct and technical aspects, and interpersonal relations/client satisfaction.

Outcome attributes look at the effects of care on health status of populations. Outcomes are thereby considered a consequence of the QoC, as for example survival and recovery of a patient or more indirectly patient satisfaction.

1.3 Quality of Care in Albania and HAP activities

QoC is a concern in Albania. The health system remains highly specialized with an emphasis on curative and in-patient care, an oversupply of hospitals and a low quality of Primary Health Care (PHC). QoC in health facilities and the attached health posts is a major concern, which is owed to the lack of investment in health facilities and technologies, an insufficient supply of pharmaceuticals, poorly trained health care workers, and a lack of systems for quality improvement and monitoring. This is also reflected in several indicators (e.g. maternal mortality, malnutrition) which are linked to quality and accessibility of health services and where Albania does not perform well (Institute of Public Health, 2014).

The baseline assessment revealed some important findings on the above described dimensions of QoC. Variations in the facility infrastructure and overall cleanliness were common between the different facilities. Usually good results were achieved for the designation of the waiting areas, the assurance of privacy and the overall cleanliness. The availability of electricity and running water was given for more than 90% and 60% of facilities respectively. A main concern was the waste management, specifically the disposal and collection of infectious or sharp waste. The availability of disinfectants as well as a washing point close to the bathrooms were not always given. Basic information (e.g. opening hours, tariffs) were displayed at facilities but contact phone numbers or the green numbers to denounce corruption were much less common. Also, logo/trademarks of pharmaceutical companies were often displayed on posters. Public emergency mechanisms were not often in place. Guidelines and protocols were also often unavailable but IEC materials have a high coverage.

Among medical equipment we only found the very basic equipment to be widely available (e.g. stethoscope for adults). Hardly any facility had equipment to assess child development and growth. Gynaecologic service equipment was also often unavailable. The medical products were also not fully available at facility level and we observed variations between the two regions.

Treatment variations between the facilities and regions were common. Generally, doctors were polite and ensured the confidentiality of the patient. Applying measures of hygiene and infection prevention was a main concern during clinical consultations. Hand washing with soap, the application of decontamination procedures, the use of gloves or masks as required were extremely low. For patients with diabetes, hypertension and other diseases we identified that the questioning and clinical history taking as well as giving advice and instructions were more common than conducting actual clinical examinations as required, although improvements are needed on all three aspects. Interactions between the doctor and patient often focussed on the immediate clinical situation and habitual risk factors and behaviour (e.g. nutrition, smoking, drinking) were often not adequately covered in the interaction.

Patient satisfaction was relatively high. We observed that (1) satisfaction in Diber is higher than in Fier; (2) satisfaction in rural facilities tends to be slightly higher than in urban facilities; (3) satisfaction varies depending on the reasons for the visits, whereby patients with chronic conditions showed some dissatisfaction. Typically, satisfaction with health services is difficult to measure as cultural beliefs and dependencies between the patient and provider influence the satisfaction as well as the general health literacy in the population and their understanding of what would be quality of services. Health spending, according to exit interviews, was very low and coverage with health insurance cards was very high.

Since the baseline survey and the start of the HAP project in 2015 a number of activities were implemented with the objective to positively influence and impact the provided QoC. Following are HAP activities that are considered relevant:

- Partial or full rehabilitation of selected health facilities.
- Providing continuous medical education to doctors and nurses (e.g. trainings, peer-review groups).
- Supplying medical tools and instruments through the doctors' bags.
- Increasing awareness on transparency and accountability in the health sector.

- Improve population health literacy in prevention and control of NCDs.
- Improving e-health implementation.

Studies carried out meanwhile since the baseline already identified positive effects of these HAP activities. Specifically the study on “Family doctors’ tool bag evaluation survey in the two Regions of the Health for All Project” conducted by Schmidlin, S. (2017) yielded interesting insights. He found that close to 100% of tools were available and functionable at the time of survey but not equally well used. Deficits in the use were particularly identified for the paediatric sphygmomanometer, the ophthalmoscope and the neurological hammer and also the competence and confidence for estimation the expected dates of delivery using the pregnancy wheel and in performing an otoscopy was varied among the sample. All of this provides already insights in possible improvements of Quality of Care over time.

2 Objectives

The objective of the endline study is to measure the QoC related to structural and procedural aspects as well as selected outcomes in health centres (HC) in the two project HAP regions in Albania. Also, to indicate changes over time in the various aspects related to QoC since the baseline study, 2015.

The specific objectives of this study are to:

- Establish an endline on the spectrum of the quality of health services in HC in both intervention regions addressing structural and procedural aspects.
- Provide information to what degree health providers have infrastructure and consumables available as outlined in the Ministry of Health (MoHSP) (December 2014) Basic Package of Services in Primary Health Care.
- Assess the quality of treatment provided by providers to patients with hypertension and diabetes.
- Compare aspects of health quality between urban vs. rural health facilities and the two regions (Fier vs. Diber).
- Establish an endline on patient satisfaction in HC in both intervention regions and compare patient satisfaction between men and women.
- Estimate selected indicators from the projects’ logical framework to monitor the improvement of health care delivery over the course of HAP.

Whenever possible the changes compared to the baseline measurement are indicated in this report so to identify the possible impact of HAP activities in QoC in Albania.

3 Methodology

3.1 Questionnaires and data collection methods

The survey included three questionnaires to assess the different dimensions of QoC: (1) at facility level (structural aspects), (2) provider level (process aspects) and (3) at the level of patients (outcomes).

- The questionnaires remain largely identical to the baseline with a mix of questions 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). The questionnaires were adapted to the Albanian local context thereby taking into consideration the MoHSP (2014) “Basic Package of Services in Primary Health Care” and the existing guidelines for family doctors.

- Some questions relating to HAP interventions and HAP infrastructure improvements (e.g. rehabilitation and equipping doctors and nurses), HAP provided information corners, and community participation in health promotion activities were introduced.
- Other questions were amended to reflect changes in policy and updated guidelines (e.g. complaining mechanisms, updated the age of check-up program from 40-65 in baseline to 35-70 endline, list of essential medicines).

The following table gives an overview on the different aspects covered in the survey tools in 2015 and 2018.

Dimension	Sub-dimension/ operationalization	Level of data collection	Comments**
Structure: Infrastructure			
Facility infrastructure, overall cleanliness 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 facility/Urban & Rural Health Centres	Without health posts
Hygiene and safety standards	• Toilets -- availability, water, soap, cleanliness	Health facility/Urban & Rural Health Centres	Without health posts
Basic/essential medical equipment and supplies	• Availability and functionality of medical equipment and supplies (according to Basic Service Package)[1]	Health facility/Urban & Rural Health Centres	Without health posts
Aspects of accountability	• Public display of key information (opening hours, tariffs, contact, complain box)	Health facility/Urban & Rural Health Centres	Without health posts
Availability of guidelines and health promotion material	• Relevant guidelines and health promotion material is available at the facility and can be easily retrieved	Health facility/Urban & Rural Health Centres	Without health posts
Availability of consumables	• Availability and quantity of consumables (according to Basic Service Package 2014) [2]	Health facility/Urban & Rural Health Centres	Without health posts
Processes: Provider – patient interaction			

[1] ibid

[2] ibid

General aspects on adherence on principles of clinical history and physical examination	• Makes a patient comfortable, e.g. seat offered • Interaction and welcoming • Privacy • Relevant explanations are given	PHC Provider	All patients* accessing the facility for consultation
Application of infection prevention and control measures	• Hand-washing practices • Procedures for disinfection	PHC Provider	All patients* accessing the facility for consultation
Observations on treatment of patients with arterial hypertension and diabetes, etc	Anamnesis • Asks relevant questions relevant for the illness • Physical examination • Conducts relevant physical examinations correctly • Explanations • Gives relevant and comprehensive explanations	PHC Provider	Patients with known/ or newly diagnosed arterial hypertension and diabetes accessing the facility for consultation
Outcomes: Patient satisfaction			
Satisfaction with privacy	-	Patient*	Accessing the facility and receiving a consultation
Satisfaction with doctor-patient interactions	-	Patient*	Accessing the facility and receiving a consultation
Satisfaction with the quality of the facility	• Respectful treatment • Doctors‘ communication and explanations • Secrecy of medical and personal information • Ability to choose doctor • Prompt attention • Decision involvement in healing options • Clean surroundings	Patient*	Accessing the facility and receiving a consultation
Socio-demographic and economic aspects	• Socio-demographic aspects • Beneficiary from public social program • Insurance situation	Patient*	Accessing the facility and receiving a consultation

*Excluding patients under 18 years without legal representative (e.g. mother/father/caretaker)

The infrastructure assessment and patient satisfaction were conducted as tablet based interviews. Interviews were based on structured and closed questions in a questionnaire, i.e. respondents were selecting an answer among various answer categories. The patient interactions were documented in the frame of structured observations, i.e. the observer sat in the consultation room and quietly observed whether a specific activity, e.g. doctor washed hands before physical examination, was being observed during a consultation or not.

The observations were structured according to treatment protocols for a) principles of clinical history and physical examination, b) infection prevention and control measures and c) diabetes

treatment, d) hypertension treatment and e) all other treatments. However, it should be noted, that the protocols for c) and d) relate to specialist treatment protocols as the MoHSP has not published treatment protocols for PHC.

Interviewers were trained and received clear instructions on the data collection, specifically the conduct of observations for the clinical consultations. Nevertheless, variations between interviewers/observers cannot be completely excluded.

3.2 Study population and sampling

The QoC endline survey was conducted in the two regions covered by HAP (Diber & Fier). It targeted the same public HC in rural and urban areas that provide primary care as during the baseline survey, 2015. During the survey data were collected at three different levels: the health facility, the health provider and the patients.

Inclusion criteria for the health facilities are as follows:

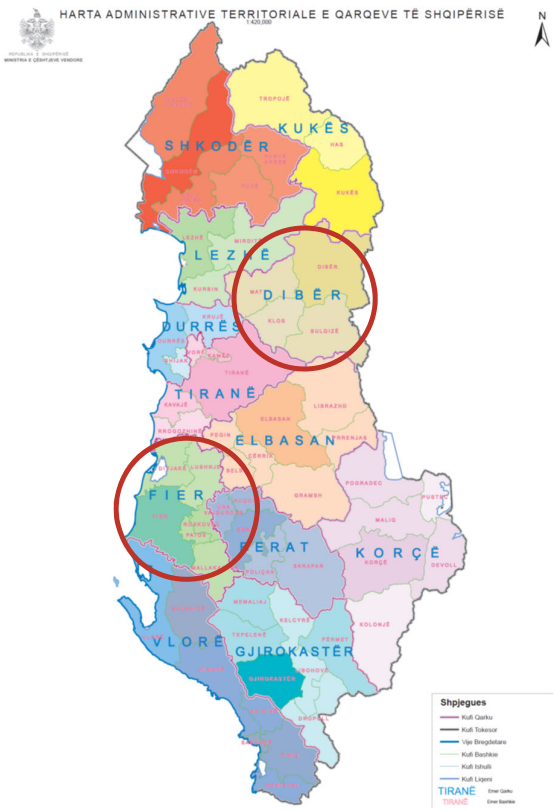
- rural or urban HC
- at least one medical doctor working at the facility
- provision of care and prevention related to chronic diseases (e.g. diabetes mellitus, hypertension)
- covered by HAP and project activities, namely Continuous Medical Education (CME)

Inclusion criteria for health providers of the selected facilities for provider-patient observations are:

- General practitioners / family doctors
- Oral informed consent of the PHC service provider
- Written informed consent of the patient or her/his's legal representative

Inclusion criteria for patients exiting the selected facilities and receiving consultation are:

- Patients, either 18 years or older or accompanied by a legal representative (e.g. mother/father/caretaker) accessing the HC and receiving consultation from a health provider for their own health or the child
- Written informed consent of the patient or her/his's legal representative



In total, the survey was conducted at 38 facilities, thereof 20 facilities in Diber and 18 in Fier region. 27 of the facilities were locate in rural and 11 of them in urban areas. An overview on the facilities is provided in Appendix C: Data Collection Schedule. Larger facilities in urban areas were sampled several times. Rural facilities were visited for two days of data collection for clinical observations and exit interviews during the endline. This is to increase the sample size. Facilities in urban areas were sampled several times. In case different clinical practices were observed, some of them were observed in doctor's health post, because not all the doctors work in the same facility. However, the infrastructure evaluation was done only for health centres and not for the health posts in both settings.

Data collectors observed as many clinical consultations during the day of the visit. Data collectors could follow different doctors within a facility in case there was more than one. Before each clinical observation oral consent was obtained from the doctor and written consent from the patient whose visit was being observed. Data collectors requested participation from all patients exiting the facility and once written consent was obtained, conducted the interviews. The infrastructural assessment was conducted together with the head of the facility or his/her closest representative, by the end of the working day.

3.3 Training & pretest

Interviewers were competitively selected and a two-day training took place on 12-13 July 2018, in Fier. All interviewers had medical or public health background. On the first training day interviewers were informed about (a) the HAP Project, (b) the aim and objectives of the survey, (c) the data collection process and procedures, (d) the structure of the questionnaires and (e) the use of the tablets. Each form and the questions were presented and discussed in detail with the data collectors. On the second training day the pretest was conducted with all interviewers divided into two groups at two rural health facilities in Fier, different from the sampled HC, they were supervised by the regional coordinator and two HAP staff. All interviewers gained experience in clinical observations and exit interviews. To conduct the infrastructural assessment the interviewer group followed a HAP supervisor and the doctor/director in the HC who showed and explained the different medical instruments.

After the pretest the HAP team collected the interviewer feedback and a few adjustments were made to the wording and translation of questions and answer possibilities. In a few instances we added additional clarifications and choices. Prior to the start of data collection, the supervisors were guided and instructed on procedures in the field, logistics and activity plan by HAP and selected implementation company.

3.4 Data collection

Field work took place between the 19 July and 07 August 2018. In total twelve interviewers (7 female and 5 male), organised in teams of two collected data. Data collection activities were closely supervised and supported by 2 supervisors from the data collection company, the two

HAP local coordinators (one in Fier and one in Diber) and a Swiss TPH PHD student. The study coordinator was also involved in supervision in the field.

The workload of data collection for one data collection team of two was fitted to one day per facility, conducting three dimensions of quality in HC. The data collection schedule is outlined in Appendix C: Data Collection Schedule. HAP regional coordinators announced the presence of data collectors to the HC directors prior to the visit.

Each day the team was brought by car to the respective facility[3]. The supervisor of the team addressed the facility heads, explained the purpose of the visit and data collection and showed the letter of approval from the MoHSP (see Appendix A).

Once interviewers received the general consent from the head of the facility they started working. Interviewers then split up the tasks and one person conducted the exit interviews and the other person conducted the clinical observations, and later in the day they alternated roles.

The purpose of the study was clearly explained to the patients. Consent for clinical observations was obtained from the respective doctor and the patient. Written consent for exit interviews was challenging and lengthy. In cases where only the interviewer was doing it other patients exiting the health services were lost. Traditionally, the national study coordinator monitored data collection activities during eight days (visiting ten health facilities or 26% of assessed health facilities). The regular monitoring ensured a smooth data collection. Any questions or unclear situation were dealt with on the same day.

Data collection was done electronically using tablets. The questionnaire software used was Open Data Kit (ODK). Typically filled questionnaires were transferred to a server in Basel, Switzerland on the same day where an initial quality check was conducted.

3.5 Analysis

Data analysis on the endline resembled largely the data analysis plan from the baseline survey in 2015. Additional analysis were carried out to compare endline to the baseline data.

Data were analysed using Stata Statistical Software (Stata Corporation; College Station, TX, USA). Summary cross-tables were created for each variable and stratified according to the regions and the locations. Potential significant differences between regions and the location, were identified using χ^2 test and Fisher's exact test.

To calculate the total across the two districts, we weighted the score according to the number of clusters and observations by region. This to account for the different sizes of the two regions.

[3] For logistics HAP had contracted an external provider.

Further, we calculated for each topical area additive indices to indicate the achieved percentage score. For a certain set of questions, e.g. infection prevention and control measures the additive index counts the answers/criteria which were fulfilled or not fulfilled. Questions/criteria which are not applicable were not considered. Inverted items were reversed for the calculation. The number of positive answers is then divided by the total of valid answers (ratio). This way a percentage score is obtained for each facility for the infrastructure assessment and each patient during the clinical observations.

Example: Clinical observation of patients

For infection prevention and control measures we measured five different aspects. For the first patient none of the aspects we measured was relevant, e.g. no examinations were done.

For the second patient only two of the five aspects were relevant: hand washing before and after the examination. Both actions were not observed. Hence this person had two valid answers but did not achieve any score. So the percentage score achieved for this person was 0.

For the third patient all five actions related to infection prevention and control measures were relevant. However, none of the five actions were observed. So the percentage score is yet once more 0.

The fourth patient was examined and instruments were used. Thus three aspects were relevant, but only one aspect (disinfection of instruments) observed. Hence 1 out of 3 were achieved, translating to a percentage score of 33%.

For the fifth patient all five aspects were considered relevant and all were also adhered to by the doctor. Hence for this person a percentage score of 100% was achieved.

Patient	Washed hands before	Washed hands after	Disinfected instruments	used gloves as required	used mask as required	Number of valid answers	Number of positive answers	Percentage (positive/valid answers)
1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	no	no	n/a	n/a	n/a	2	0	0
3	no	no	no	no	no	5	0	0
4	no	no	yes	n/a	n/a	3	1	33
5	yes	yes	yes	yes	yes	5	5	100

Yes/no: as observed; n/a: action was not needed, e.g. no examination conducted

To illustrate the distribution of scores we use box plots. The lower end of the box marks Q25, the upper end of the box marks Q75 and the line in the box marks Q50 (median). The whiskers are calculated using 1.5 the interquartile range (Q75-Q25) or until the maximum. Outliers are displayed separately. For comparing averages, we used T-tests and indicate the 95%-confidence interval.

3.6 Ethical considerations

This endline QoC assessment is integrated in the Project HAP work plan 2018. Project HAP submitted a request for approval of the study to the Ministry of Health and Social Protection, so to ensure full collaboration and transparency with national and local authorities and health providers. An approval letter was received on the 10.05.2018. (Appendix B).

All study participants i.e. service providers and users were provided with oral information on the study. Oral consent for providers and written consent for users was obtained confirming the voluntary participation and right to withdraw from the study at any point in time. The interview with patients exiting the facility was conducted in the yard or in some cases where suitable, in the large HC corridors, to allow for maximum privacy.

4 Results

4.1 Infrastructural Assessment

The following section outlines the results of the infrastructural assessment, which was conducted in 38 facilities, thereof 20 in Diber and 18 in Fier. Of those, 11 facilities are located in urban centres (Diber: 4; Fier: 7).

The assessment of facilities included sections on the overall cleanliness and maintenance, hygiene aspects, public accountability/transparency, availability of guidelines and materials, general medical equipment and the availability of drugs and medical products. Specifically, for medical equipment we assessed not only their availability but also whether the equipment was functional.

Estimations were done identical to the baseline assessment to ensure comparability, i.e. we calculated an additive index including all items assessing the infrastructure and calculating how many scores out of all possibly infrastructure scores were achieved per facility. The results are presented as percentage scores using box plots. In addition to the comparison between the district and the location we also include a comparison of those facilities officially rehabilitated by HAP in this sample (Diber n=3; Fier n=2) and the others. Additional questions included in the endline are presented separately (see also chapter 3.1).

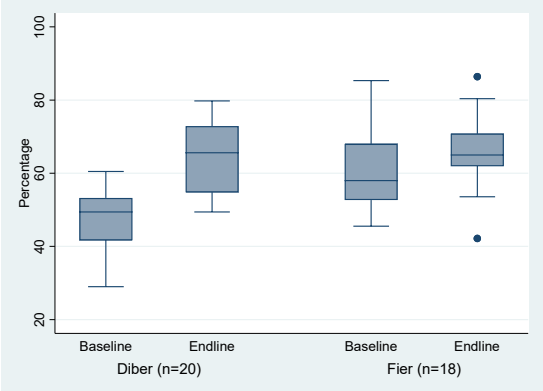
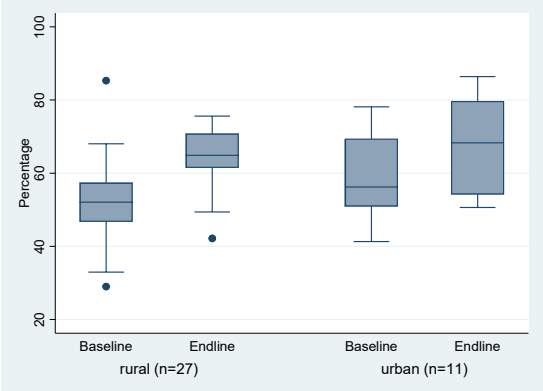
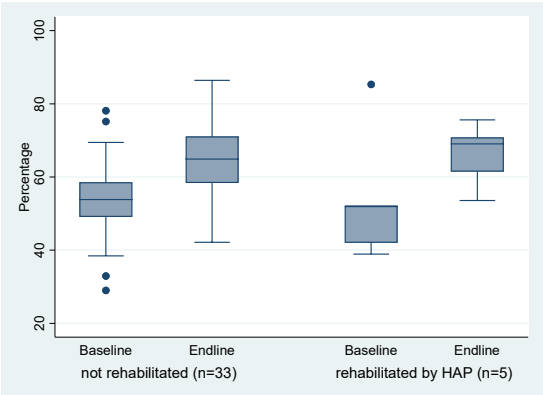
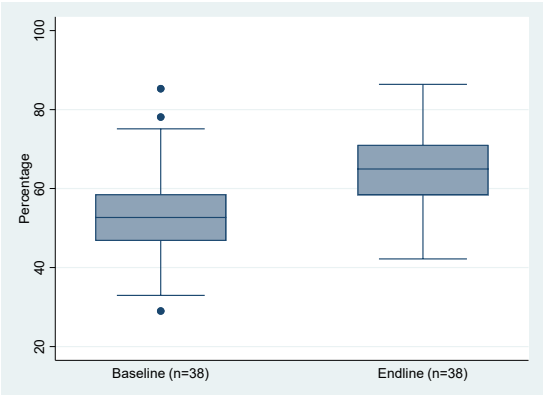
Overall, we observe infrastructure improvements from base- to endline for all sub-groups (see Table 1). The overall infrastructure score is shown as an average percentage score across all infrastructure sub-topics, namely facility infrastructure and overall cleanliness, hygiene, Public accountability/transparency, Guidelines and materials and Basic/essential medical equipment and supplies. Hence, 0 would be the lowest possible score, indicating that the specific groups had no infrastructure at all available and 100 would indicate that across the various sub-topics all infrastructural requirements that the surveys assessed were fully available. In addition we show the respective standard errors and 95%-confidence intervals

In Diber the score increased by 17% from base- to endline for the sampled facilities in Diber and 6% in Fier (Table 1). In rural facilities the increase is 13% compared to 9% increase in urban facilities. Similarly, we observe increases in both groups: facilities not rehabilitated by HAP and also those benefitting from infrastructural investments by HAP. Looking at the distribution of scores (Figure 1) we do observe differences specifically for the rehabilitated facilities by HAP. Whilst the baseline was – due to the small sample size – heavily influenced by an outlier the overall score of facilities was low so that during the endline we see a clear shift. Statistically significant are the following changes: the baseline to endline for rural facilities and for not rehabilitated facilities as well as the overall between base- and endline.

Table 1: Average achieved overall score (percentage) between base- and endline for several subgroups

	Baseline			Endline		
	Mean	**Std. Err.**	**95% Conf. Interval**	**Mean**	**Std. Err.**	**95% Conf. Interval**
Diber	47.2	1.8	43.5, 50.9	64.7	2.2	60.3, 69.2
Fier	60.9	2.5	56.0, 65.8	65.7	2.4	60.9, 70.5
Rural	52.0	2.1	47.7, 56.2	64.4	1.6	61.1, 67.7
Urban	57.9	3.6	50.7, 65.2	67.1	3.9	59.3, 75.0
Not rehabilitated	53.6	1.8	50.0, 57.3	65.1	1.8	61.5, 68.6
Rehabilitated HAP	54.1	8.2	37.7, 70.5	66.1	4.0	58.1, 74.1

Figure 1: Average infrastructure score – overall achievement (percent)

Comparison between Diber and Fier	Comparison between rural and urban facilities
	
Fisher's exact p-value: Baseline = 0.964; Endline = 0.551; Diber = 0.116; Fier = 0.236	Fisher's exact p-value: Baseline = 0.647; Endline = 0.417; Rural = 0.003; Urban = 1.000
Comparison between HAP rehabilitated and not rehabilitated facilities	**Comparison base- and endline (national)**
	
Fisher's exact p-value: Baseline = 0.229; Endline = 0.999; Not rehabilitated = 0.007; Rehabilitated = 0.444	Fisher's exact p-value = 0.000

4.1.1 Facility infrastructure and overall cleanliness

The facility infrastructure and overall cleanliness remains with variations although the variations have been reduced (Diber) or at least kept stable. Most of facilities achieved more than 50% of scores. Variations in Diber between the facilities were reduced and kept stable in Fier. By tendency urban facilities score higher and also the rehabilitated facilities score high. However, observed differences across all subgroups are not statistically significant.

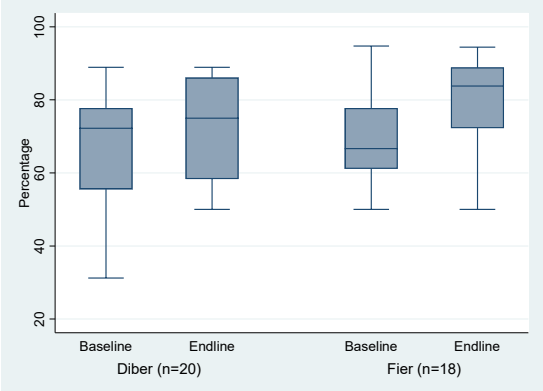
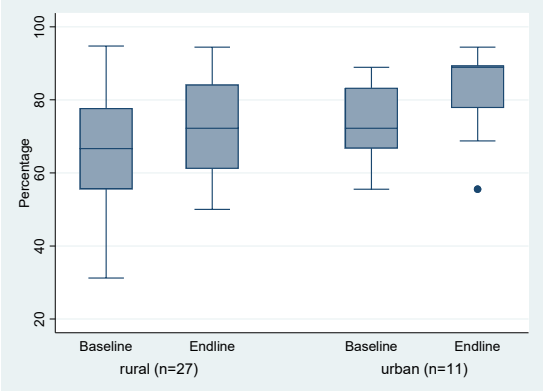
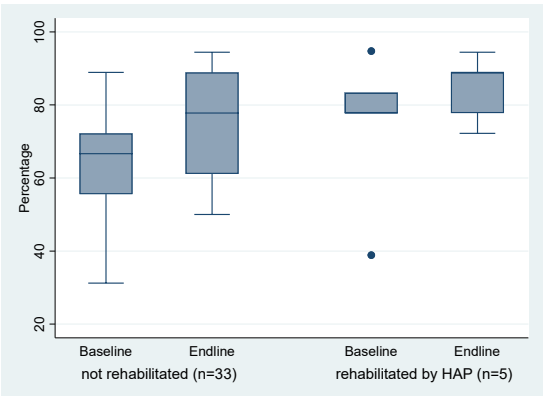
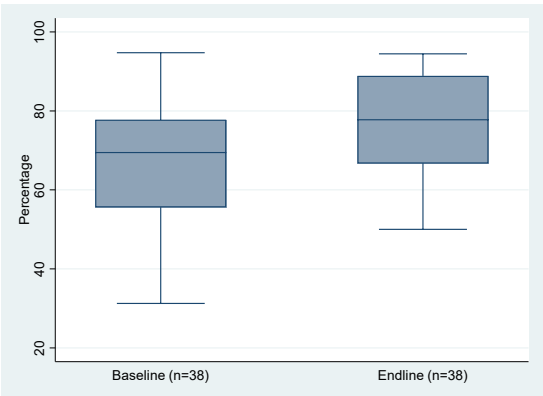
There are improvements from baseline to endline, related to overall cleanliness. Overall facilities are clean (61% in baseline to 76% in endline), have designated rooms (76% in baseline to 95%) and waiting areas tend to be clean (87% in baseline to 92% in endline) also privacy is well ensured in the consulting rooms (87% in baseline to 95% in endline). The consultancy rooms leave an overall tidy impression (95% in baseline to 100% in endline) and are illuminated (89% in baseline to 92% in endline). In both regions the administration shelves are filed and ordered (89% in baseline to 95% in endline).

At endline the large majority of facilities had designated (95%) and clean waiting rooms (92%), consultation rooms that ensure the privacy of the patient (95%), that are clean (100%) and well illuminated. Consultation rooms for women and children were available in approximately 75% of facilities. Also, surroundings are clean (76%) and the rubbish bins are properly used (71%). Specifically, the availability of a designated waiting room and the appropriate use of the rubbish bins are considered as improvements compared to the baseline (76%). Slight improvements observable over time for all other aspects although most are not statistically significant.

Infrastructure problems persist regarding electricity: whilst electricity is in principle available in the health facilities, 49% report power cuts during opening times in the past seven days and shortages of power during particular seasons (27%). During the baseline survey power cuts in the past seven days were lower (19%) but power cuts during specific times of the year were slightly more common (35%), specifically in winter or stormy days. Of note: at the time of the endline only two facilities had a functional generator with fuel available. Similarly, only 34% of facilities have a functional heating system. Most commonly used are halogen heaters but also wooden stoves. This is a substantially lower proportion than facilities who declared to have such during the baseline survey, specifically in Diber where 100% had declared to have a functional heating system.

The situation is similar for functional communication equipment: we observe a decline from 100% during baseline to 80% during endline in Diber and an increase from 44% in the baseline to 67% during endline in Fier (Fisher exact <0.05). Most commonly used in both districts are private cell phones (Diber 100%; Fier 67%). Computers and printers are more often available in Fier than in Diber (Fisher exact <0.05), although the situation in Diber has substantially improved. Detailed information for each item can be found in Annex B.1.

Figure 2: Average score for facility infrastructure and cleanliness (percent)

<table>
<tr><th>Comparison between Diber and Fier</th><th>Comparison between rural and urban facilities</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Fisher's exact: p-value: Baseline = 0.950; Endline = 0.375; Diber = 0.911; Fier = 0.287</td><td>Fisher's exact: p-value: Baseline = 0.394; Endline = 0.217; Rural = 0.593; Urban = 0.035</td></tr>
<tr><th>Comparison between HAP rehabilitated and not rehabilitated facilities</th><th>Comparison base- and endline (national)</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Fisher's exact: p-value: Baseline = 0.018; Endline = 0.993; Not rehabilitated = 0.455; Rehablitated = 0.524</td><td>Fisher's exact p-value = 0.309</td></tr>
</table>

4.1.2 Hygiene

Regarding hygiene there are positive changes from baseline to endline, and we identified statistically significant differences between the two regions with Fier achieving higher scores, also during the endline evaluation. However, Diber region records significant increase in some aspects of hygiene. Urban facilities also achieved better results though the difference to rural facilities was not statistically significant.

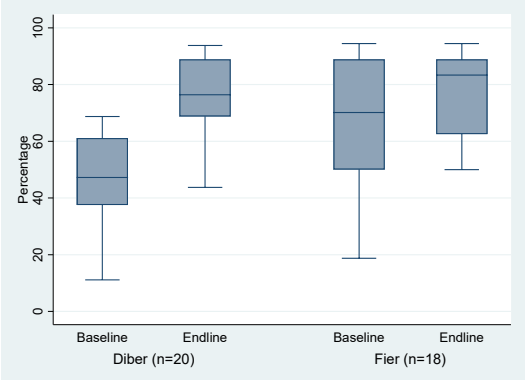
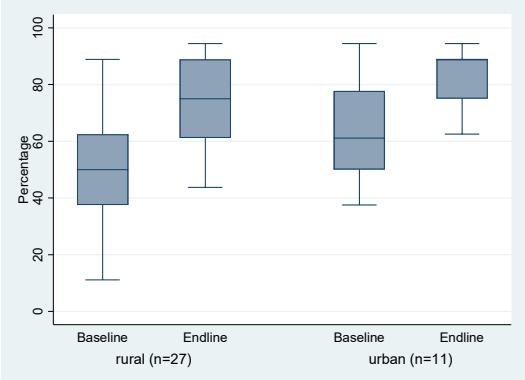
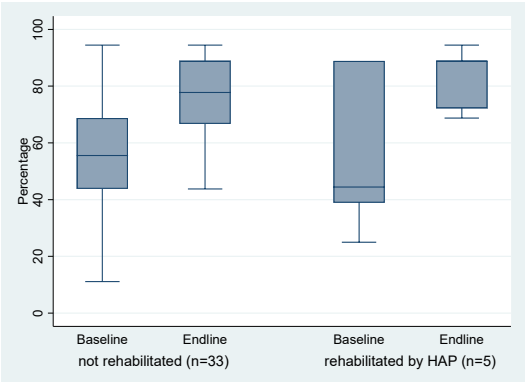
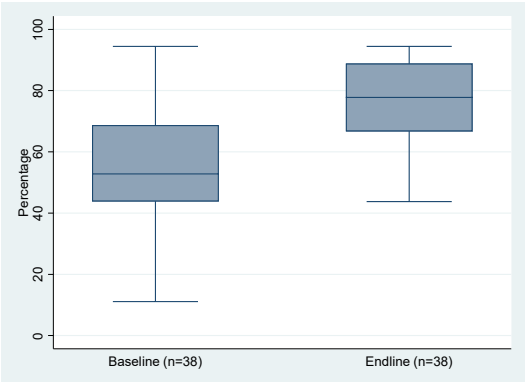
While during baseline, the aspects of waste disposal were considered weak, the endline shows an optimistic picture: the waste management within the facility but also from the facility to a safe disposal site (collection of waste) has substantially improved. Labelled containers for medical waste disposals are available in 42% more facilities than during the baseline (baseline 26%; endline 68%). Facilities are also doing better regarding the adequate and safe disposal of sharps (baseline 47%; endline 97%) and infectious waste (baseline 37%, endline 92%). The appropriate and regular collection and disposal of sharps and infectious waste is improved (baseline for both aspects 55%, endline 87% for infectious waste and 92% for sharp waste). Both districts improved substantially, particularly the use of containers in Diber. A continuous challenge is the temporary storage of waste at the facilities.

The water situation at facilities remained largely unchanged during the base- and endline: around 65% have running water out of the tap. The situation for warm water running out of the

tab has also improved (baseline 21%; endline 44%) though the differences are exclusively caused by improvements in Fier (baseline 33%; endline 71%). Water shortages at certain times of the year remain a problem for 20% of facilities, specifically in Diber, despite substantial improvements over time. For such instances, facilities try to store some water in plastic containers/buckets or fetch it at the nearest neighbour.

Another important hygiene aspect is the availability of toilets for patients and staff, water and soap close by and their cleanliness. During the endline survey a functional toilet was available for staff at most facilities (87%) but only in 58% facilities for patients. Cleanliness, a washing point close by was found in 80% of facilities. Room for improvement is the availability of soap which remained largely unchanged (around 65% of facilities having soap at the day of the visit). The availability of chlorine solutions or other disinfectants for instruments also did not see large change (baseline 42%, and endline 58%). For details see also Annex B.1.

Figure 3: Average score for hygiene (percent)

<table>
<tr><th>Comparison between Diber and Fier</th><th>Comparison between rural and urban facilities</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Fisher's exact p-value: Baseline = 0.037; Endline = 0.113
Diber = 0.007; Fier = 0.685</td><td>Fisher's exact: p-value: Baseline = 0.303; Endline = 0.553
Rural = 0.074; Urban = 0.049</td></tr>
<tr><th>Comparison between HAP rehabilitated and not rehabilitated facilities</th><th>Comparison base- and endline (national)</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Fisher's exact p-value: Baseline = 0.212; Endline = 0.979
Not rehabilitated = 0.117; Rehabilitated = 1.000</td><td>Fisher's exact p-value = 0.078</td></tr>
</table>

4.1.3 Public accountability / transparency

The graph below shows that higher scores on accountability/transparency are achieved in Diber and also in urban facilities, although the results are not statistically significant. Also, for some elements of accountability and transparency the endline scores are lower.

Facilities are easy to find as their location is visible to the public. Ministry of Health and Social Protection put a strong emphasis on ensuring transparency and accountability into Primary Health Care and HAP Project ensured that these interventions happen into both regions. There are also improvements on aspects related to transparency: the display of the green numbers (the green number in the PHC centres is a free to call number to denounce corruption in the PHC) to denounce corruption (baseline 5%; endline 79%), a reduction of facilities showing logo/trademarks from pharmaceutical companies (baseline 53%; endline 16%), explicit referral or emergency mechanisms, excluding the use of private cars (baseline 26%; endline 55%), the display of information on the “basic check-up for the population 35-70[4] years old” (baseline 63%; endline 89%) and the Albanian Charter of patients’ rights (baseline 50%; endline 87%). The improvements of the last two aspects is mainly due to substantial improvements in Diber.

We also noted some critical developments from base- to endline: Working hours are displayed in 74% of PHC service providers to the outside. This is a reduction compared to the baseline

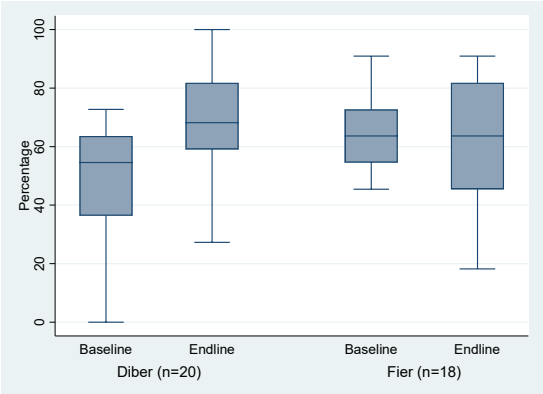
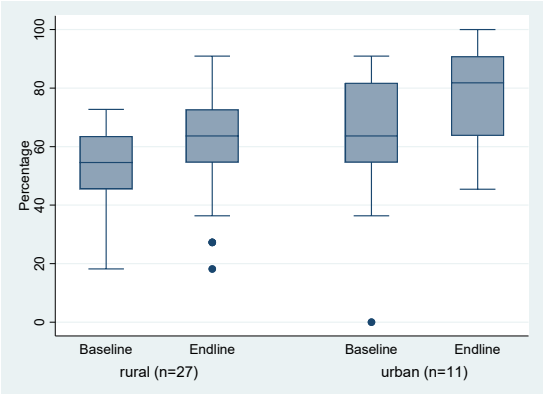
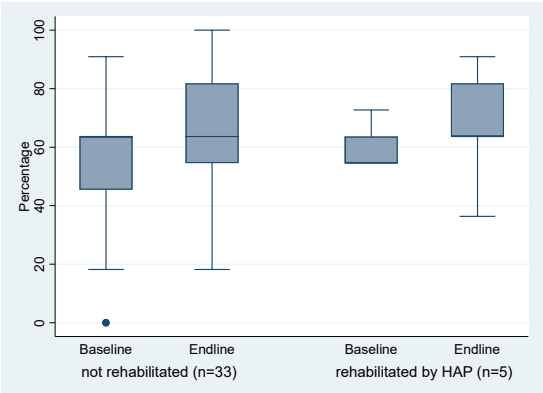
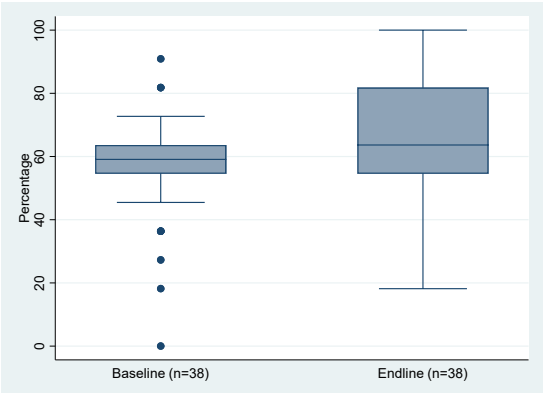
[4] The Basic checkup for the population extended the age group in 2016 from 40-65 years to 35-70 years of age.

(90%). Also, the information on tariffs (baseline 84%; endline 50%)[5] and information on tobacco control (baseline 92%; and endline 63%) are less often displayed than in 2015. In only 26%[6] of facilities do patients have the possibility to give feedback and opinions on services using a box/book (baseline 37%). Another aspect that remains stable but unsatisfactory low is the display of a contact phone numbers (approximately 40%).

During endline and as part of the quality check of operations of PHC services the facilities were assessed if they had any supportive supervision (SSV) visits from the Public Health Directories. As per regulations, there should be four annual supportive supervision visits from the Directory of Public Health departments to each health centre (not ambulantas). The visits relate to quality, infrastructure and performance of the HC staff and are carried out by different departments of the Public Health Directory. SSV visits were done for 100 % of health centres, and 63% reported to have a SSV during 2018, 5% during 2017, and 32% don't remember when the last SSV was done. Almost 45% of health centres provided proof of the visits (e.g. reports), and 55% did not.[7] Epidemiology units were the most active units to conduct SSV (32%), followed by the Family Medicine Unit (18%), and Monitoring and Evaluation Unit (11%). For around 40% of the SSV the respondents reported other structures (Health Insurance Fund 18%) or did not remember from which institution/unit the visitors were from. Detailed information for each item can be found in Annex B.1.

[5] Since 2017, through a Minister Order, there is free of charge visit at FD into PHC, however there are other tariffs to be paid for services into PHC.
[6] In almost all cases there were a box in HC to put in the leaflets/forms of complaints or opinions, but in many cases the leaflets/forms where missing. In this respect the interviewer recorded as a "No" answer.
[7] In many cases the documents stays with the economist of HC and the economists work part time. The infrastructure evaluation was conducted at the end of the working day, and this can be a reason for this inconsistency of having the SSV done and don't showing the reports.

Figure 4: Average score on public accountability/transparency (percent)

<table>
<tr><th>Comparison between Diber and Fier</th><th>Comparison between rural and urban facilities</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Fisher's exact p-value: Baseline = 0.230; Endline = 0.654;
Diber = 0.092; Fier = 0.675</td><td>Fisher's exact p-value: Baseline = 0.103; Endline = 0.445
Rural = 0.300; Urban = 1.000</td></tr>
<tr><th>Comparison between HAP rehabilitated and not rehabilitated facilities</th><th>Comparison base- and endline (national)</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Fisher's exact p-value: Baseline = 0.852; Endline = 0.416
Not rehabilitated = 0.459; Rehabilitated = 0.286</td><td>Fisher's exact p-value = 0.416</td></tr>
</table>

4.1.4 Guidelines and materials

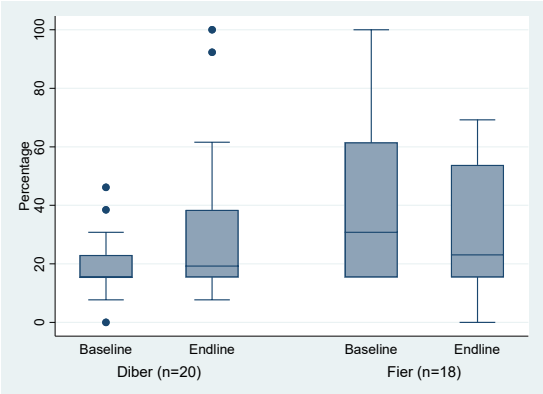
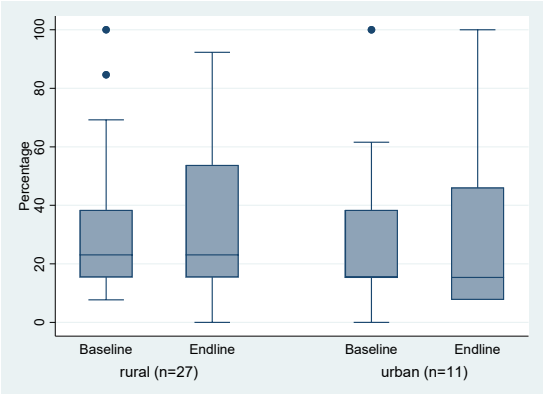
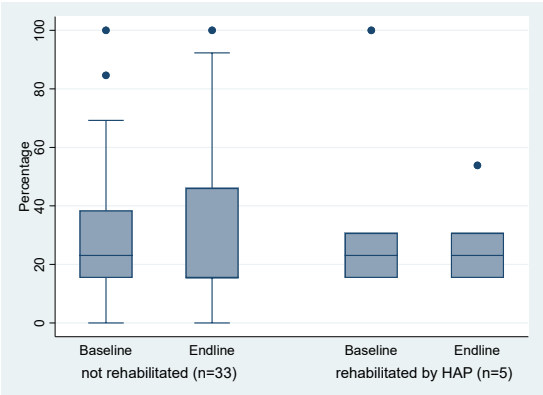
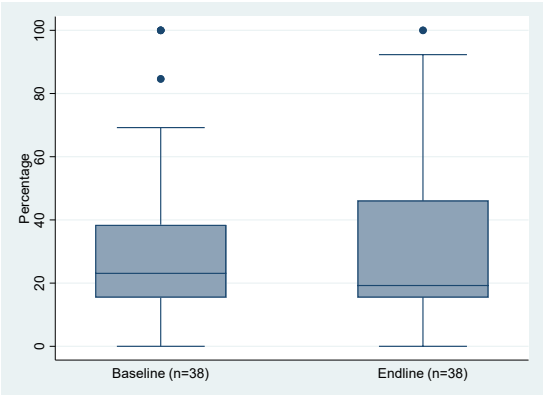
The availability of guidelines and protocols (for details see Annex B.1) in facilities in both regions is extremely low, in both evaluations – base- and endline. Clear trends for improvements cannot be detected. Whilst we had discovered some statistically significant differences between the districts during the baseline, these did no longer persist during the endline, indicating that both districts are now more alike to each other.

Selected examples that we observed are: the guideline on “antenatal care in primary care” (Diber baseline 0%, endline 6%; Fier baseline 22%, endline 6%), and protocols of clinical practice on “antenatal care in primary care” (Diber baseline 5%, endline 15%; Fier baseline 39%, endline 33%), the guideline of clinical practice for seniors (Diber baseline 5%, endline 15%; Fier baseline 33%, endline 33.3%) or the protocols of clinical practice of family medicine based on the guidelines for seniors (Diber baseline 5%, endline 10%; Fier baseline 28%, endline 28%). Differences between rural or urban facilities were again not observed.

The only exceptions to the remarkably low availability of guidelines and protocols are the IEC materials, specifically the calendar for vaccination/immunisation and awareness materials

based on the standard package info (children, adults, women and reproductive health, seniors and mental health), for both evaluations. At endline these two materials were available in 89% of facilities (baseline 100%) and 100% of facilities in Fier (baseline 80%-90%) (see also Annex B.1).

Figure 5: Average score on guidelines and material (percent)

<table>
<tr><th>Comparison between Diber and Fier</th><th>Comparison between rural and urban facilities</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Fisher's exact p-value: Baseline = 0.143; Endline = 0.312;
Diber = 1.000; Fier = 0.062</td><td>Fisher's exact p-value: Baseline = 0.797; Endline = 0.298
Rural = 0.475; Urban = 0.266</td></tr>
<tr><th>Comparison between HAP rehabilitated and not rehabilitated facilities</th><th>Comparison base- and endline (national)</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Fisher's exact p-value: Baseline = 0.605; Endline = 0.871;
Not rehabilitated = 0.416; Rehabilitated = 1.000</td><td>Fisher's exact p-value = 0.327</td></tr>
</table>

4.1.5 Basic/essential medical equipment and supplies

Below we outline the available and functional equipment at facility level. For the analysis, we counted equipment that was available but not functional as if not available. Dysfunctional equipment was not common but for each equipment item this was typically the case in one or two facilities.

General medical equipment (available and functional)

In order to strengthen health services, HAP distributed medical tool bags to 223 family doctors in two project regions Dibër and Fier in the course of 2016 and 2017. At the time of data collection 100% (20/20) of doctors in Diber region had received the bag, and 89% (16/18) of doctors in Fier. The doctors' bag includes 17 pieces of medical equipment (adult, pediatric and fetal stethoscope, an adult and pediatric sphygmomanometer, otoscope, ophthalmoscope,

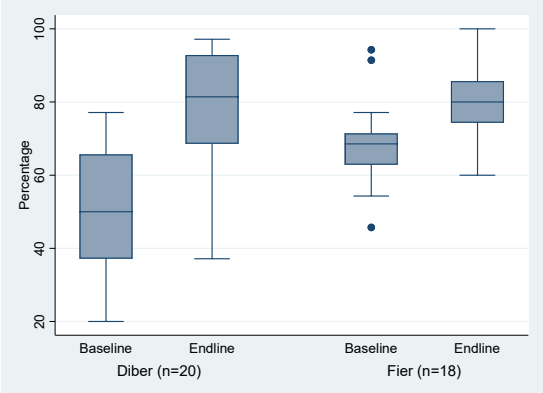
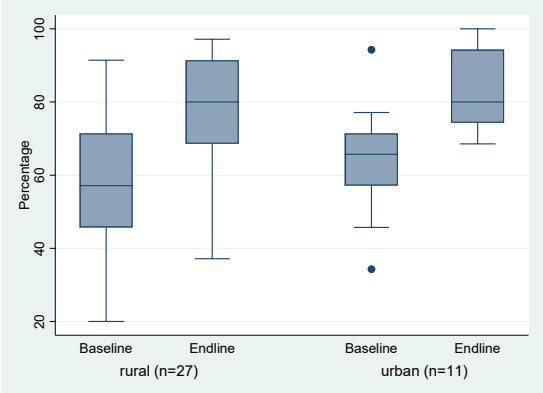
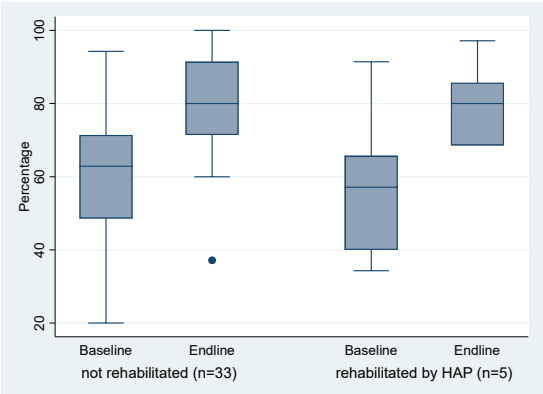
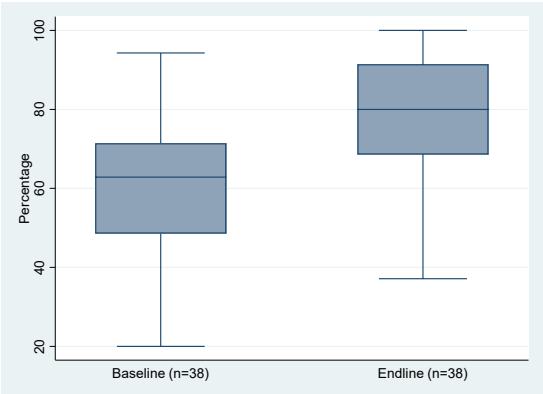
peak flow meter, oximeter, neurological hammer, glucometer including strips, pregnancy wheel, digital thermometer, measuring tape, pocket light, tourniquet and resuscitation mask) that fulfil the requirements of the list of medical equipment of the Basic Package of Services.

Specifically, for the survey we investigated whether 35 general medical equipment items are available at the health center. We observe positive and statistically significant changes between baseline and endline for both regions regarding the availability of medical equipment. While during the baseline only two equipment items were available at all facilities (stethoscope for adults and a thermometer), the endline showed eight equipment items being available at all facilities (weight scale for adults, weight scale for children, weight scale for infant and toddler, sphygmomanometer for adults, meter for height for children up to two, and over two years old, thermometer and tongue depressor).

During baseline several equipment items were available in only 20%-50% of facilities, while in endline evaluation these items were available for more than 65% of the facilities: nebulizers, light source, nasal speculum, opthalmoscope, stadiometer for grown up children, sphygmomanometer for children, height meter board for children up and over two years of age, ear syringe, child growth chart or fracture rods. Specifically, low in the baseline was the availability of peak-flow meters (5%), while in the endline the availability of this item is 92%.

Statistically significant differences that were identified in 2015 between the districts were no longer statistically significant. Statistically significant differences between rural and urban facilities were not observed. Detailed information for each item is listed in Annex B.1.

Figure 6: Average score on general medical equipment (percent)

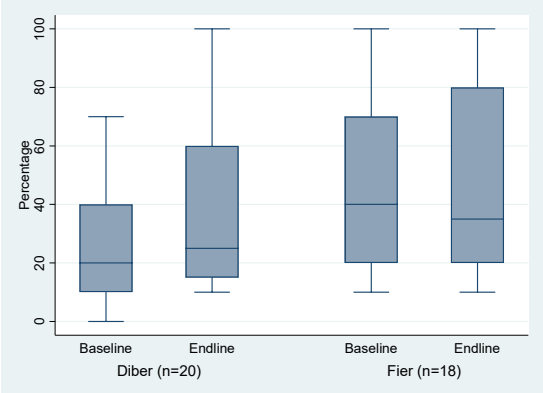
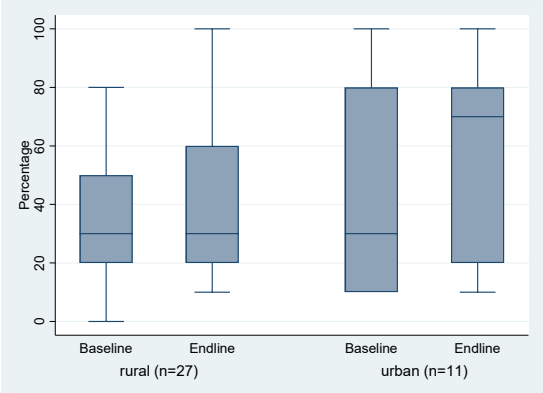
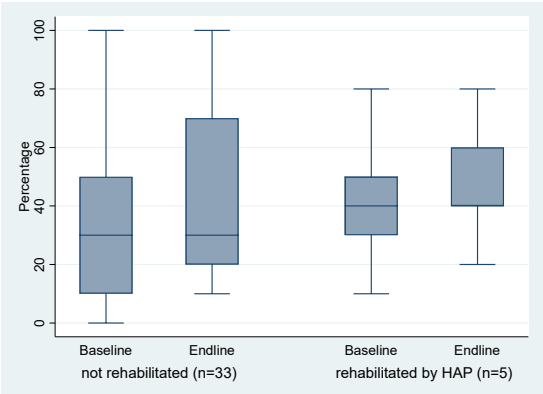
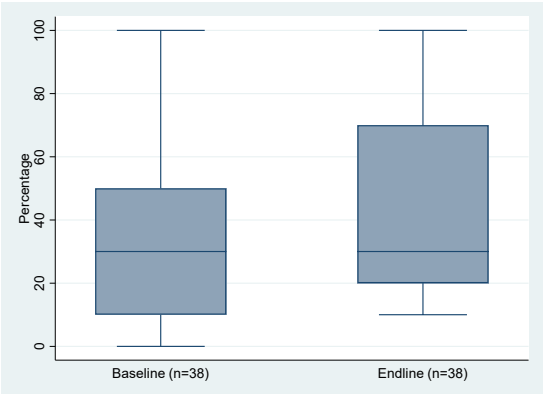
Comparison between Diber and Fier	Comparison between rural and urban facilities
	
Fisher's exact p-value: Baseline = 0.583; Endline = 0.786; Diber = 0.022; Fier = 0.003	Fisher's exact p-value: Baseline = 0.987; Endline = 0.997; Rural = 0.004; urban = 0.083
Comparison between HAP rehabilitated and not rehabilitated facilities	**Comparison base- and endline (national)**
	
Fisher's exact p-value: Baseline = 0.251; Endline =0.799; Not rehabilitated = 0.000; Rehabilitated = 0.444	Fisher's exact p-value = 0.000

Gynaecological service equipment

The situation regarding equipment required for providing gynaecological services remains largely unchanged to the baseline. Hardware, i.e. gynaecological bed, instruments or oxygen tank and inhalators are available at less than half of the visited facilities, typically only at 30%-40% of visited facilities.

Different sizes of vaginal speculums are found in approximately 30% of facilities, showing almost a doubling of the availability of these pieces of equipment since 2015. Pap smear materials are rarely found, as it is performed in lab or hospital conditions only. Latex gloves (baseline 84%; endline 100%) and masks for doctors (baseline 65%; endline 71%) are more common. Differences between the regions are no longer relevant at time of the endline survey (see also Annex B.1).

Figure 7: Average score on gynaecological equipment (percent)

<table>
<tr><th>Comparison between Diber and Fier</th><th>Comparison between rural and urban facilities</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Fisher's exact p-value: Baseline = 0.070; Endline = 0.151;
Diber = 0.331; Fier = 0.592</td><td>Fisher's exact p-value: Baseline = 0.184; Endline = 0.523;
Rural = 0.687; Urban = 0.585</td></tr>
<tr><th>Comparison between HAP rehabilitated and not rehabilitated facilities</th><th>Comparison base- and endline (national)</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Fisher's exact p-value: Baseline = 0.703; Endline = 0.130;
Not rehabilitated = 0.843; Rehabilitated = 1.000</td><td>Fisher's exact p-value = 0.734</td></tr>
</table>

Delivery set and advanced equipment[8]

From all facilities only eight indicated having a delivery set available, thereof two urban facilities both located in Fier. The other delivery sets were distributed equally among rural facilities in Diber and Fier. During endline, not all delivery sets were sterile (baseline 100%; endline 57%), also when we checked the availability of 15 items in the delivery set we discovered that eight items were not included in all facilities The items were: sterile cat gut, surgical coat, oxytocin ampoule and metergine ampoule, plastic aspiration tubes for newborns, lydocain and oxytocin, and endline sterile gauze, umbilical cordon clip, needles and needle bearer.

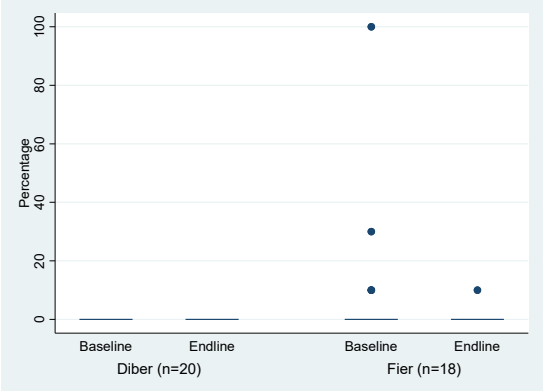
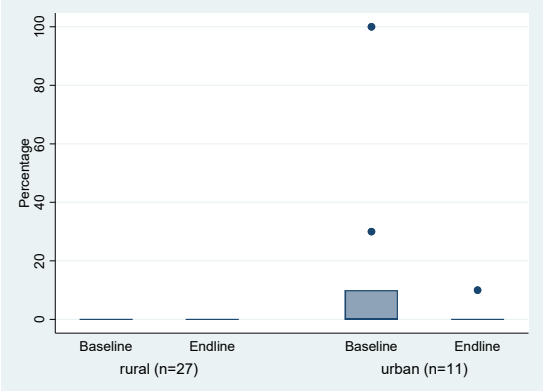
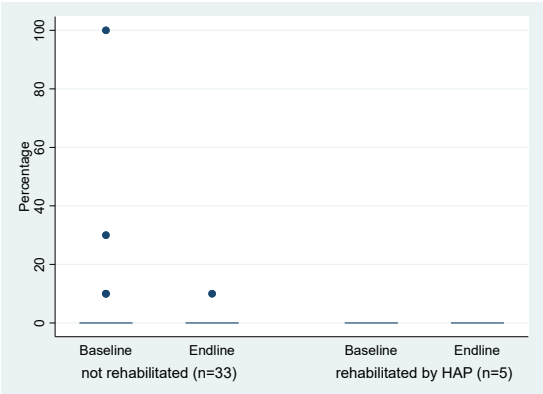
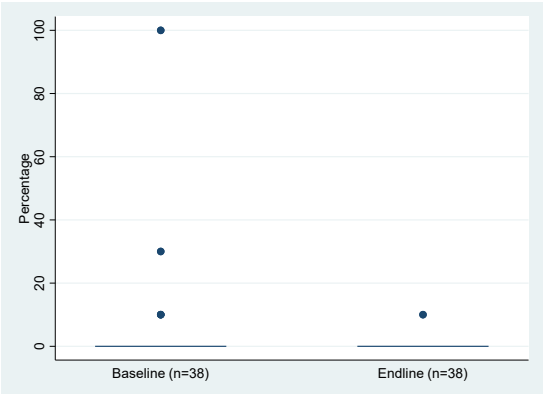
In comparison: the availability of advanced equipment has substantially improved though also here the sample is very small (EKG 11.1% to 82%, autoclave 33% to 54.5%, photometer 0% to 36.6% and, centrifuge 11% to 54.5%). Detailed information for each item can be found in Annex B.1.

[8] Each health centre is responsible for taking the decision on the availability of a delivery set within the health centre based on the accessibility of the nearest obstetrical facility/hospital. However, in the absence of OBGYN more HC do not practice anymore deliveries.

4.1.6 Equipment to assess and monitor child growth[9]

We observed an extremely low availability of 10 items needed to assess and monitor child growth, in both evaluations. In Diber literately none of the items were available at any facility. In Fier only three facilities had a doll. All other equipment was available in less than three facilities, but among them was one facility that had all 10 different items available. Facilities that had any of these items were all located in urban settings. The situation remains thus as critical as during the baseline. For detailed information see Annex B.1.

Figure 8: Average score on equipment to assess and monitor child growth (percentage)

<table>
<tr><th>Comparison between Diber and Fie</th><th>Comparison between rural and urban facilities</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Fisher's exact p-value: Baseline = 0.041; Endline = 0.474; Diber = n/a; Fier = 0.404</td><td>Fisher's exact p-value: Baseline = 0.004; Endline = 0.289; Rural = n/a; Urban = 0.380</td></tr>
<tr><th>Comparison between HAP rehabilitated and not rehabilitated facilities</th><th>Comparison base- and endline (national)</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Fisher's exact p-value: Baseline = 1.000; Endline = 1.000; Not rehabilitated = 0.420; Rehabilitated = n/a</td><td>Fisher's exact p-value = 0.422</td></tr>
</table>

4.1.7 Medication and medical products

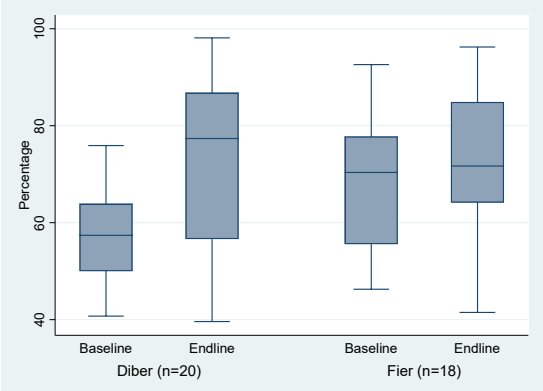
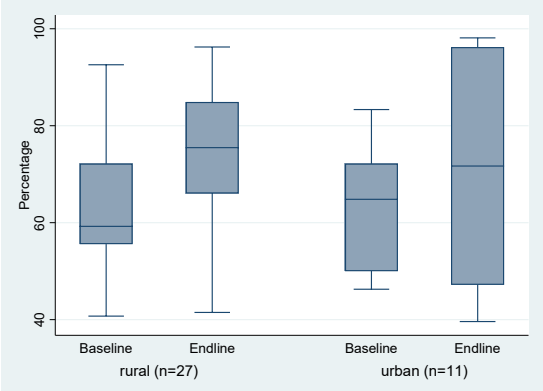
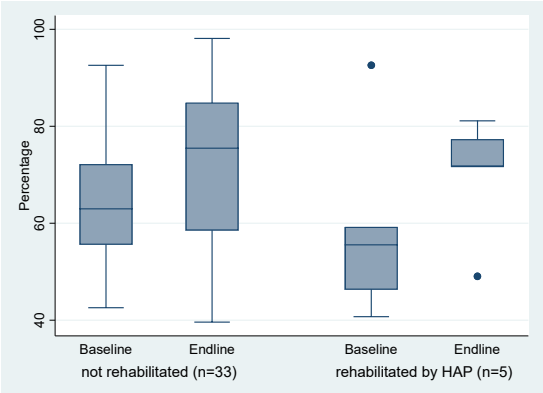
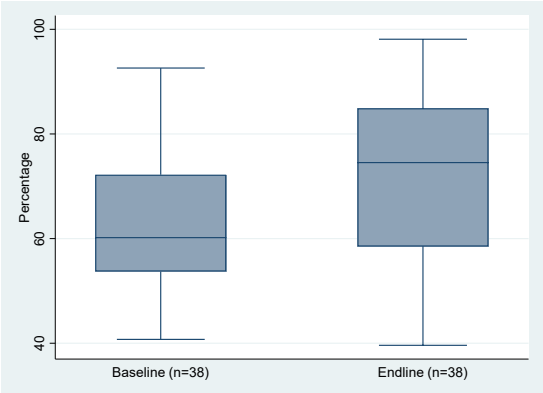
Based on the list of essential medicines, updated on June 2018, at the facility for basic services, we assessed the availability of 58 medical products, compared to 53 medical products that were taken into account in the frame of the baseline. Medication and medical products herewith relate mainly to essential drugs that are needed for treatment at the health centres, i.e. mostly for emergency services or other health care provided at the center.

[9] APPENDIX 4: LIST OF NECESSARY TOOLS FOR DEVELOPMENT ASSESSMENT – under BASIC PACKAGE OF SERVICES IN PRIMARY HEALTH CARE 2014

We observed variations of item availability between 32% and 100% during endline, with slightly higher availabilities of items in Diber (average 73%, median: 78%) compared to Fier (average 71%, median: 72%). We observed statistically significant differences for both regions, rural and urban facilities and facilities not rehabilitated by HAP between the base- and endline. The figure 9 also shows very distinct graphs for HAP rehabilitated facilities but due to the very limited sample size the outliers are likely affecting the statistical test.

Papaverin, alcohol ethylic, and oxytocin solution were available at all facilities during endline. Another 14 items were found in more than 90% of facilities. Only 10 items were available in less than 50% of (baseline 14 items)[10]. For the other items we observed substantial variations. Where differences were identified the availability was typically better in Fier region (see also: Annex B.1).

Figure 9: Average score on medication and medical products (percent)

<table>
<tr><th>Comparison between Diber and Fier</th><th>Comparison between rural and urban facilities</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Fisher's exact p-value: Baseline = 0.242; Endline = 0.746; Diber = 0.000; Fier = 0.002</td><td>Fisher's exact p-value: Baseline = 0.110; Endline = 0.501; Rural = 0.000; Urban = 0.026</td></tr>
<tr><th>Comparison between HAP rehabilitated and not rehabilitated facilities</th><th>Comparison base- and endline (national)</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Fisher's exact p-value: Baseline = 0.778; Endline = 0.982; Not rehabilitated = 0.000; Rehabilitated = 0.444</td><td>Fisher's exact p-value = 0.000</td></tr>
</table>

[10] Baseline: (dextrose, epinephrine, prochlorperasin, morphin sulphate, salbutamol, hydrocortisone, dihidroergotamin, nebulizer or volume pump, vitamin A and D, amoxicillin/erythromycin, chlorfeniramin, al hydroxide & mg hydroxide, glycerine, kalium (potassium) iodine).

Endline; (antivipera serum, haloperidol, morphine sulphate, oxytocin solution, chlorfeniramin, silver sulphadiazine, hydrocortisone, magnesium sulphate, silver nitrate, and amiodarone hydrochloride)

4.2 Clinical Observations

The clinical observations questionnaire assessed doctors' adherence with different standards and protocols related to (1) principles of clinical history and physical examinations, (2) hygiene and infection prevention and control, (3) clinical assessment of a diabetes mellitus patient, (4) clinical assessment of a patient with arterial hypertension and (3) clinical assessment of a patient with a condition other than diabetes mellitus or hypertension.

4.2.1 Socio-economic profile of patients and doctors

Overall, we conducted 842 clinical observations during the endline survey thereof 354 in Diber and 488 in Fier (baseline 625, thereof 175 in Diber and 450 in Fier). The average number of observations per facility was 22 (median 19; min: 2; max: 64) with a lower average in Diber than in Fier (18 vs. 27 respectively). Differences in the number of consultations between the two regions reflect the different utilization rate of health services. In Diber we conducted 33% of observations in urban facilities compared to 53% in Fier.

Mostly patients attended the facility for health reasons other than diabetes and hypertension (baseline 64%; endline 67%) followed by hypertension (baseline 29%; endline 27%) and diabetes (baseline 7%; endline 6%). Specifically, diabetes was more prevalent among observations in urban facilities. Among patients, 56% were female and the average age was 50 years with the minimum being infants and the eldest being 90 years old (average Diber: 48 years; average Fier: 51).

Observations were done at a level of a total of 86 doctors during the endline (baseline: 52 doctors) and average of 9 observations per doctor (min: 1; max. 36). Thus, the ranges of observations are similar to the baseline study. Doctors were mostly female (73%) and 59% were general doctors, 41% contracted as family doctors (baseline general doctors 94%, family doctors: 4%; specialists 2%).[11]

[11] Doctors described themselves as family doctors. As the number of generalists trained in the specialization of family medicines is very low, the self-classification is thus more likely relating to general doctors being contracted as family doctors.

Table 2: Socio-demographic attributes of patients and doctors of clinical consultations

	Baseline					Endline				
	Diber % (n)	**Fier % (n)**	**Rural % (n)**	**Urban % (n)**	**Total % (n)**	**Diber % (n)**	**Fier % (n)**	**Rural % (n)**	**Urban % (n)**	**Total % (n)**
Number of observations (patients)	28.0% (175)	72.0% (450)	40.2% (251)	59.8% (374)	100.0% (625)	42.0% (354)	58.0% (488)	55.0% (463)	45.0% (379)	100.0% (842)
- thereof female	52.6% (92)	56.7% (255)	51.8% (130)	58.0% (217)	55.5% (347)	52.0% (184)	58.8% (287)	53.4% (247)	59.1% (224)	55.9% (471)
Ages										
<5	16.6% (29)	8.0% (36)	17.9% (45)	5.3% (20)	10.4% (65)	7.3% (26)	7.6% (37)	8.2% (38)	6.6% (25)	7.5% (63)
5 – 18	11.4% (20)	7.1% (32)	13.1% (33)	5.1% (19)	8.3% (52)	8.2% (29)	4.7% (23)	7.3% (34)	4.8% (18)	6.3% (52)
19 – 49	25.7% (45)	17.3% (78)	22.3% (56)	17.9% (67)	19.7% (123)	26.8% (95)	21.7% (106)	23.0% (106)	25.1% (95)	23.9% (201)
50 – 65	26.3% (46)	25.6% (160)	24.7% (62)	38.5% (144)	33.0% (206)	30.8% (109)	34.8% (170)	33.1% (153)	33.3% (126)	33.1% (279)
>65	20.0% (35)	32.0% (144)	21.9% (55)	33.2% (124)	28.6% (179)	26.8% (95)	31.2% (152)	28.5% (132)	30.3% (115)	29.3% (247)
Reason for visit										
Arterial hypertension	24.6% (43)	30.9% (139)	24.3% (61)	32.4% (121)	29.1% (182)	30.1% (159)	27.1% (254)	27.0% (193)	29.2% (220)	28.2% (413)
Diabetes	2.3% (4)	8.7% (39)	2.4% (6)	9.9% (37)	6.9% (43)	3.8% (20)	7.8% (73)	4.5% (32)	8.1% (61)	6.3% (93)
Other	73.1% (128)	60.4% (272)	73.3% (184)	57.8% (216)	64.0% (400)	66.2% (350)	65.1% (611)	68.5% (489)	62.7% (472)	65.5% (961)
	Diber % (n)	**Fier % (n)**	**Rural % (n)**	**Urban % (n)**	**Total % (n)**	**Diber % (n)**	**Fier % (n)**	**Rural % (n)**	**Urban % (n)**	**Total % (n)**
Number of doctors that were observed	48.1% (25)	51.9% (27)	50.0% (26)	50.0% (26)	100.0% (52)	44.2% (38)	55.8% (48)	50.0% (43)	50.0% (43)	100.0% (86)
- thereof female	60.0% (15)	77.8% (21)	42.3% (11)	96.2% (25)	69.2% (36)	71.1% (27)	75.0% (36)	55.8% (24)	90.7% (39)	73.3% (63)
Type of doctors (contracted)										
Family doctor*	4.2% (1)	3.7% (1)	-	7.7% (2)	3.9% (2)	44.7% (17)	37.5% (18)	48.8% (21)	32.6% (14)	40.7% (35)
General doctor	96.0% (24)	92.6% (25)	100.0% (26)	88.5% (23)	94.2% (49)	55.3% (21)	62.5% (30)	51.2% (22)	67.4% (29)	59.3% (51)
Specialist	0.0% (0)	3.7% (1)	-	3.9% (1)	1.9% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

* Doctors described themselves as family doctors. As the number of generalists trained in the specialization of family medicines is very low, the self-classification is thus more likely relating to general doctors being contracted as family doctors.

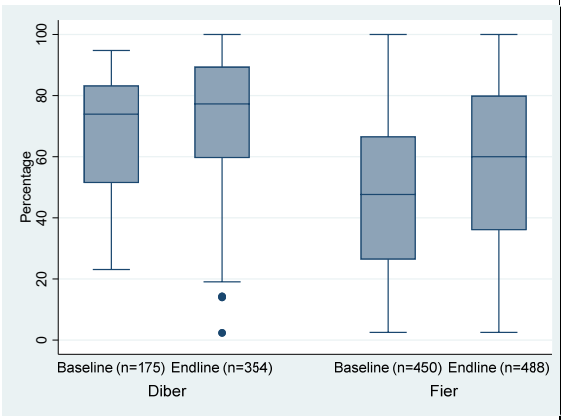
The graphs display all overall achievements per consultation, between regions, urban and rural regarding both evaluations, and in general between both evaluations. This was done by calculating an additive index by dividing the achieved scores for adherence to good clinical practice, hygiene and adherence to treatment guidelines, specifically for diabetes and hypertension by the number of all possible scores. The results are presented as percentage scores using box plots.

In general, the median for clinical observations has been improving by around 20% in the time period 2015 to 2018 (baseline 55% endline 74%). Endline data vary between 52% to 89% scores for almost 50% of the facilities, while baseline the scores vary from 35% to 75%, for half of the facilities. Both regions improved their overall performance over time though the

variation of observations has not changed, i.e. in each region there are still low-performing facilities. Also, the relative positions between Diber and Fier have only slightly changed, i.e. 75% in Fier is still scoring the same or lower than 50% in Diber. For rural vs. urban facilities the changes over time are not as pronounced although once more observations from rural facilities appear more compact than observations in urban facilities.

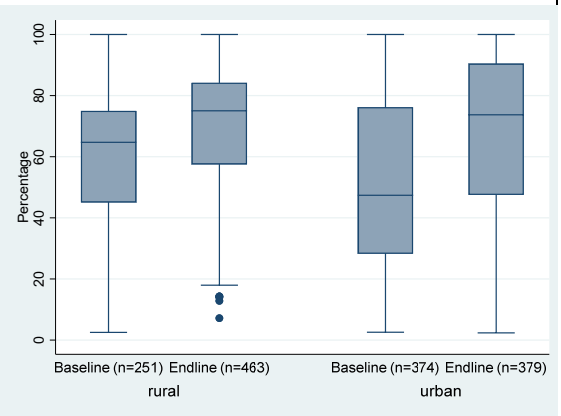
Figure 10: Clinical observation score – overall achievement (percent)

Comparison between Diber and Fier



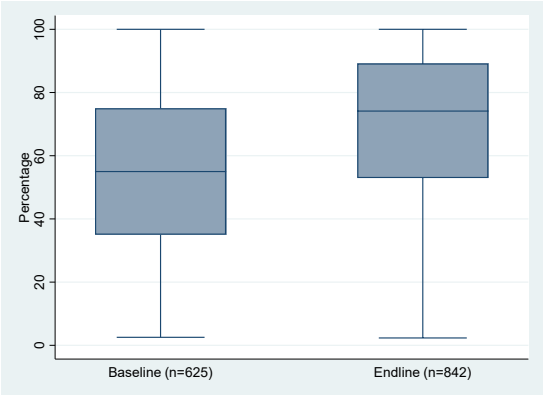
Chi Squared Test p-value: Baseline = 0.000; Endline = 0.000; Diber = 0.000; Fier = 0.000

Comparison between rural and urban facilities



Chi Squared Test p-value: Baseline = 0.000; Endline = 0.000; Rural = 0.000; Urban = 0.000

Comparison between the base- and endline



Chi Squared Test p-value = 0.000

4.2.2 Principles of clinical history, physical examination and infection prevention

Adherence to principles of good clinical practice and physical examination achieved very good results in both regions. Consequently, there is a general improvement in the time period 2015 to 2018. Confidentiality and making the client comfortable were two critical factors during baseline specifically in Fier. In this respect the scores improved by at least +25%. In general terms observed differences between the districts were much smaller during the endline than during the baseline. Similarly, to the baseline, differences between rural and urban facilities were not statistically significant. The polite closing of the consultation was adhered to in most instances, in both evaluations.

Table 3: Adherence to principles of history and physical examination

	Baseline								Endline								p-value**
	Diber %	Fier %	p-value**	Rural %	Urban %	p-value**	Total* %	N	Diber %	Fier %	p-value**	Rural %	Urban %	p-value**	Total* %	N	
The medical doctor																	
… greets the client.	98.3% (172)	96.0% (432)	0.154	95.6% (240)	97.3% (364)	0.245	**96.3% (604)**	625	99.7% (353)	100.0% (488)	0.240	99.8 % (462	100.0% (379)	0.365	**99.9% (841)**	842	0.000
… sees the client in privacy/confidentiality.	89.7% (157)	62.9% (283)	0.000	73.3% (184)	68.5% (256)	0.192	**66.4% (440)**	625	98.3% (348)	88.5% (432	0.000	94.8% (439)	89.9% (341)	0.007	**91.9% (780)**	842	0.000
… makes the client comfortable (e.g. seat offered)	96.6% (169)	79.8% (359)	0.000	84.1% (211)	84.8% (317)	0.814	**82.0% (528)**	625	99.7% (353)	97.3% (475)	0.008	98.9% (458)	97.6% (370)	0.144	**98.1% (828)**	842	0.000
… asks the client about concerns, allows client to explain his/her health issue.	98.9% (173)	84.4% (380)	0.000	91.6% (230)	86.4% (323)	0.043	**86.3% (553)**	625	98.3% (348)	97.1% (474)	0.269	97.4% (451)	97.9% (371)	0.648	**97.5% (822)**	842	0.000
… closed politely the consultation.	95.2% (160)	96.4% (423)	0.527	96.7% (236)	95.5% (347)	0.484	**96.2% (607)**	607	97.7% (339)	99.8% (429)	0.007	98.4% (436)	99.4% (332)	0.206	**99.0% (768)**	777	0.001

* weighted total; ** chi-square test

Table 4: Infection prevention and control

	Baseline								Endline								p-value**
	Diber %	Fier %	p-value**	Rural %	Urban %	p-value**	Total* %	N	Diber %	Fier %	p-value**	Rural %	Urban %	p-value**	Total* %	N	
… washed hands before the procedure (including use of soap).	39.1% (75)	4.2% (18)	0.000	6.0% (15)	4.3% (15)	0.340	6.0% (30)	625	39.1% (75)	4.2% (18)	0.000	19.3% (63)	10.0% (30)	0.001	12.7% (93)	625	0.000
… applied proper decontamination procedures (e.g. soaking contaminated instruments into a bucket with chlorine or any other disinfectant)	0.0% (0)	0.0% (0)	n.s.	0.0% (0)	0.0% (0)	n.s.	0.0%	90	21.2% (42)	1.2% (2)	0.000	9.5% (24)	18.2% (20)	0.020	10.6% (44)	362	0.000
… put on gloves where required.	1.4% (1)	6.1% (2)	0.016	5.2% (3)	0.0% (0)	0.106	3.9% (3)	107	7.8% (13)	0.0% (0)	0.007	3.1% (6)	11.3% (7)	0.012	4.6% (13)	253	0.326
… put on a mask where required.	0.0% (0)	0.0% (0)	n.s.	0.0% (0)	0.0% (0)	n.s.	0.0% (0)	116	1.9% (3)	6.6% (6)	0.053	0.5% (1)	12.3% (8)	0.000	3.9% (9)	251	0.039

* weighted total; ** chi-square test

During the baseline infection prevention and control measures were often not implemented. This was also observed in the endline with infection prevention and control measures remaining a weak spot, although some slight changes were observed. Hand washing with soap is a drastic example: whilst in most cases this would have been necessary, almost none of the doctors did so, with significant differences between Diber and Fier. Based on the result of the endline survey, the frequency of handwashing remains important [12].

Regarding the application of decontamination procedures, the use of gloves or masks as required, we identified slight improvements for the endline survey compared to the baseline and this was more visible in urban areas than rural ones.

4.2.3 Patients with diabetes

Of the 625 clinical observations we observed slightly more clinical consultations with diabetes patients during the endline (n=50) compared to the baseline (n=43). Still due to the limited number of observations the generalizability of our findings is limited specifically for Diber (baseline n=4; endline n=16). During the endline evaluation the number of diabetic patients observed in rural and urban centres were almost the same (rural n= 26, urban n=24). This is a difference to the baseline, where observations in rural areas were so low that we could not observe statistically significant differences (rural n=6; urban n=37).

If comparing between the two evaluations, we observe more variations towards adherence to the general diabetes treatment guideline of Albanian MoHSP during the endline (the data vary between 18% - 70% of scores) compared to the baseline.

Overall, we observe a greater variation among observations during the endline than during the baseline and an improvement for Diber for the endline in comparison to the baseline that is statistically significant. However, both aspects are likely related to the increase in observations. The relative scoring between the districts remains similar to the baseline: Diber scores overall higher than Fier in the endline

Also, for all sub-aspects Diber scores significantly better during the endline than the baseline: asking questions (Diber 70%; Fier 28%), conducting examinations (Diber 51%; Fier 12%) and providing advice (Diber 86%; Fier 40%).

Looking at the different items (see also Annex A.1) we identified that when looking at the averages between the two regions - like in the baseline - the commonly asked questions were about adherence with diabetes treatment (baseline 62%; endline 77%), specific health complaints (baseline 53%; endline 56%), and general weakness (baseline 44%; endline 54.5%). In the endline doctors also asked regularly about whether the patient was using other medicine (baseline 26%; endline 41%). Questions on smoking, alcohol, a sedentary way of life or eye-sight were much more addressed than during the baseline, e.g. sedentary way of life (baseline 5%; endline 42.6%). Overall Diber scored much better regarding the questioning than Fier, although also for Fier we observe positive developments.

For aspects related to conducting examinations the findings between the districts are different: Diber improved drastically (though possibly to do with increasing number of observations included in the study) whilst in Fier results are largely stagnating since the baseline. Hence differences in overall averages are largely related to the changes in Diber. Examples are increases for the doctor explaining about tests and procedures (baseline 28%; endline 57%); the check of blood pressure (baseline 40%; endline 52%) or the perfusion of legs (baseline 2%; endline 23%). For several examinations (e.g. checks on eyes, auscultation of heart, examination of abdomen, palpation of liver and signs of percussion) we observed that they were carried out with less than 10% of patients – thus remaining as low as during the baseline.

Common advice, explanation or instructions were provided to patients for the situation and diagnosis (baseline 56%; endline 70%), the need for follow-up visits (baseline 47%; endline

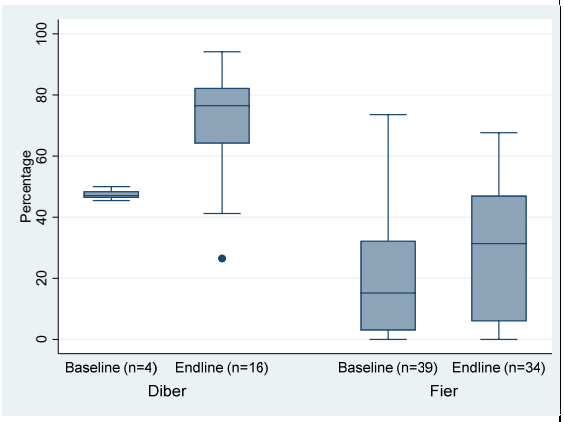
[12] In some cases, the doctors were washing hands because of the interviewer presence. They were aware that hand washing should be done, but they didn't. While observing more than one clinical practice, they use to wash hands in the first examinations and then no more.

72%), prescribed medicines (baseline 47%; endline 78%) and the results of the examination(s) (baseline 42%; endline 67%).

In both districts we observed overall improvements in how they provided advice and explanations for diabetic patients. Good results were achieved for explanations on prescribed medicines/treatment (78%), about follow-up visits (72%), the situation and diagnosis (69.3%) and, where applicable, the results of examinations (67%). For these aspects increases of approximately 20% were achieved. Important aspects, e.g. smoking, appropriate care of legs or physical exercise remain though still unsatisfactorily addressed (22%, 22%, 33%).

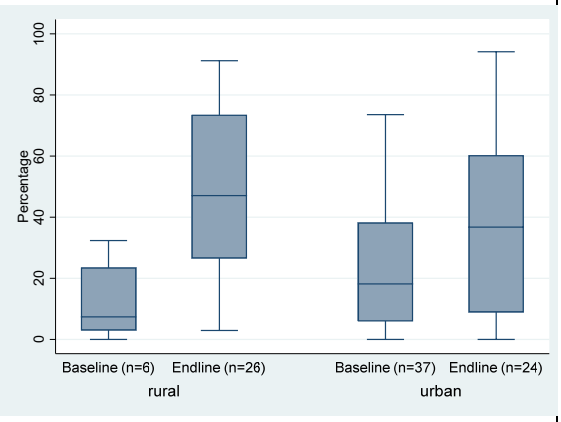
Figure 11: Score on diabetes treatment (percent)

Comparison between Diber and Fier



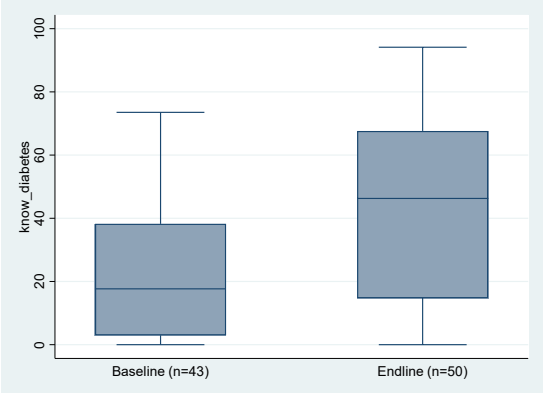
Fisher's exact p-value: Baseline = 0.047; Endline = 0.000; Diber = 0.059; Fier = 0.152

Comparison between rural and urban facilities



Fisher's exact p-value: Baseline = 0.523; Endline = 0.161; Rural = 0.823; Urban = 0.086

Comparison between the base- and endline



Fisher's exact p-value = 0.297

Table 5: Average achieved percentage out of all diabetes items

	Baseline							Endline						
	Diber (95% CI)	**Fier (95% CI)**	**T-test p-value**	**Rural (95% CI)**	**Urban (95% CI)**	**T-test p-value**	**Total* (95% CI)**	**Diber (95% CI)**	**Fier (95% CI)**	**T-test p-value**	**Rural (95% CI)**	**Urban (95% CI)**	**T-test p-value**	**Total* (95% CI)**
Asks questions	45.5% (33.6% - 57.3%)	22.7% (15.3% - 30.1%)	0.057	18.2% (-5.2% - 41.6%)	25.9% (18.2% - 33.6%)	0.450	**23.6% (13.5% - 33.6%)**	69.7% (59.0% - 80.4%)	27.9% (18.4% - 37.4%)	0.000	47.3% (34.9% - 59.7%)	34.7% (21.1% - 48.4%)	0.166	**38.5% (31.6% - 45.5%)**
Conducts examination	19.4% (10.6% - 28.3%)	10.5% (4.8% - 16.3%)	0.326	1.9% (-2.9% - 6.6%)	12.9% (7.0% - 18.9%)	0.143	**10.9% (4.8% - 16.9%)**	51.4% (39.2% - 63.6%)	11.8% (6.7% - 16.8%)	0.000	27.3% (16.9% - 37.8%)	21.3% (10.7% - 31.9%)	0.407	**21.8% (16.9% - 26.8%)**
Advices, explains and instructs	68.2% (60.1% - 76.3%)	23.4% (15.6% - 31.2%)	0.001	14.3% (9.0% - 27.7%)	29.7% (20.6% - 38.9%)	0.186	**25.1% (17.3% - 32.9%)**	86.1% (75.6% - 96.5%)	40.4% (29.9% - 50.8%)	0.000	58.3% (45.1% - 71.5%)	51.4% (35.9% - 66.9%)	0.488	**51.0% (45.3% - 58.7%)**

* weighted total

4.2.4 Patients with hypertension

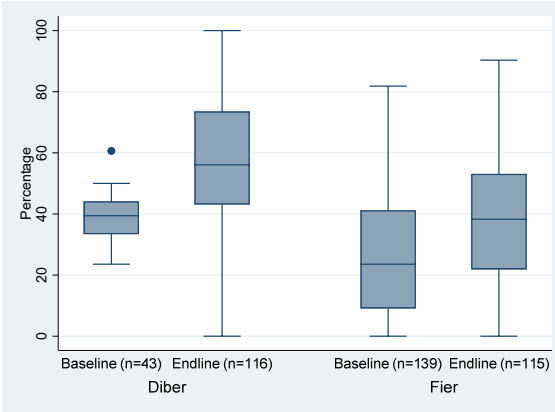
We observed 231 clinical hypertension consultations out of 824 in endline, thereof 116 (50%) in Diber and 115 (50%) in Fier hence increasing the number of observations for hypertension compared to baseline (Diber n=43; Fier n=139). Among our observations we conducted 132 in rural (57%) and 99 in urban facilities (43%).

Overall, we observed positive differences between the base- and endline, i.e. an increase in overall scores. Most notably is the observed increased variation between the base- to the endline for Diber. Whilst during the baseline the observations were relatively compact with a median achievement of about 40%, we observe that during the endline, the median is higher (close to 60%) but at the same time the variation has substantially increased. For Fier we also observe increases but the variation across facilities remain largely the same. Hence the differences between the two regions were statistically significant for both evaluations.

In addition, we observed substantial improvements in the quality of hypertension consultations for rural facilities and to a lesser extent for urban facilities compared to the baseline. Differences were statistically significant. However, as for the baseline we continue to observe also for the endline large variations.

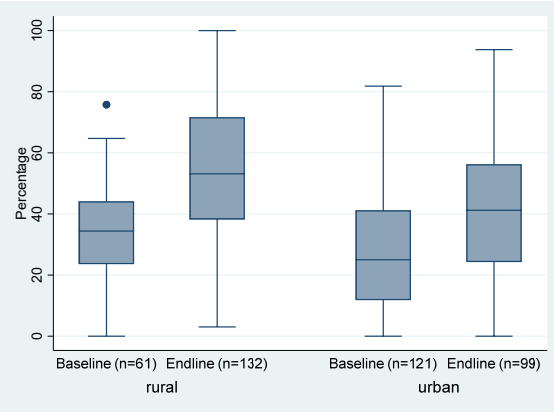
Figure 12: Average score on hypertension treatment (percent)

Comparison between Diber and Fier



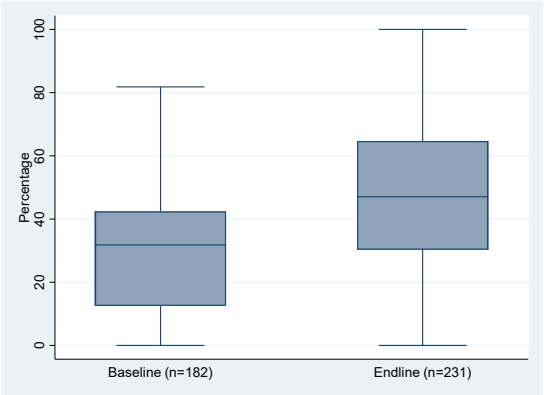
Chi Square test p-value: Baseline = 0.001; Endline = 0.037; Diber = 0.017; Fier = 0.000

Comparison between rural and urban facilities



Chi Square test p-value: Baseline = 0.109; Endline = 0.127; Rural = 0.065; Urban = 0.001

Comparison between the base- and endline



Chi Square test p-value = 0.000

The weighted average scores (percentages) for both regions in both evaluations were best for giving advice (baseline 38%; endline 60%) and less so for asking questions (baseline 24%;

endline 46%). For conducing examinations, a weighted average score 26% was achieved during the endline (baseline 18%). It appears that on all three aspects Diber is slightly doing better than Fier specifically on the conduct of examinations and advice as differences are statistically significant, for both evaluations. Rural areas also seem to perform on average better than urban facilities specifically on asking questions and the conduct of examinations, in base- and endline (Table 5).

Among questions (see Annex A.1) asked most frequently to patients when doing the anamnesis are the same as during the baseline although we see an overall increase, i.e. doctors are doing the anamnesis with more detail. Most often doctors asked for adherence with treatments of relevant cases (endline 91%; baseline 75%), high blood pressure (endline 86%; baseline 45%) and any specific health complaints (endline 72%; baseline 68%). Questions asked in 20% or less of cases are on eye sight (baseline 5%, endline 20%), smoking (baseline 5%; endline 16%), alcohol (baseline 4%; endline 15%), a visit to the ophthalmologist (baseline 1%; endline 2%) and the use of contraception (where applicable).

Similarly, to the baseline, doctors checked most commonly the blood pressure (baseline 82%; endline 85.6%) when treating hypertensive patients. Other checks were not as regularly conducted and though we do not see systematic increases between the base- and endline there is a slight positive trend: chest or auscultation of the lungs (baseline 15%; endline 18%), auscultation of heart in 5 points (baseline 13%; endline 11%), check on skin (baseline 5%; endline 14%), check of abdomen, palpation of liver and signs of percussion (baseline 4%; endline 8%), perfusion of legs (baseline 3%; endline 19%), eyes (baseline 1%; endline 13.5%) and weight measurement during (baseline 1%; endline 13%)

Similarly, to the advice and explanations provided for diabetic patients and as during the baseline, doctors focussed mostly on the results of examinations (baseline 71%; endline 87%), on prescribed medicines of applicable cases (baseline 63%; endline 81%), situation and diagnosis (baseline 76%; endline 80%). Other aspects commonly mentioned were the importance of treatment adherence (baseline 52%; endline 74%), the follow-up visit (baseline 58%; endline 77%), about needed examinations (baseline 33%; endline 66%), the prognosis (baseline 60%; endline 54%), nutrition (baseline 14%; endline 52%), complications of the illness (baseline 33%; endline 52%) and risks if illness is not treated (baseline 36%; endline 51%).

Advice on sustaining or reducing smoking (baseline 5%; endline 17%) and physical exercise (baseline 8%; endline 33%), was – as during the baseline – the least frequently provided.

Table 6: Average achieved percentage out of all hypertension items

	Baseline							Endline						
	Diber (95% CI)	**Fier (95% CI)**	**T-test p-value**	**Rural (95% CI)**	**Urban (95% CI)**	**T-test p-value**	**Total* (95% CI)**	**Diber (95% CI)**	**Fier (95% CI)**	**T-test p-value**	**Rural (95% CI)**	**Urban (95% CI)**	**T-test p-value**	**Total* (95% CI)**
Asks questions	28.8% (25.7% - 32.0%)	23.7% (20.2% - 27.1%)	0.115	30.2% (25.3% - 35.2%)	22.2% (18.9% - 25.4%)	0.006	24.2% (18.9% - 29.5%)	56.7% (52.6% - 60.7%)	38.6% (34.2% - 43.0%)	0.000	53.9% (49.8% - 57.9%)	39.4% (34.7% - 44.2%)	0.000	46.3% (42.1% - 50.4%)
Conducts examination	22.5% (19.6% - 25.3%)	17.3% (14.6% - 19.9%)	0.040	23.3% (18.9% - 27.7%)	16.1% (13.8% - 18.3%)	0.001	17.8% (14.1% - 21.6%)	38.0% (33.6% - 42.4%)	18.0% (14.9% - 21.1%)	0.000	33.7% (29.4% - 37.9%)	20.5% (16.9% - 24.2%)	0.000	26.4% (22.6% - 30.3%)
Advices, explains and instructs	59.4% (54.2% - 64.5%)	35.4% (31.0% - 39.9%)	0.000	46.0% (39.9% - 52.1%)	38.6% (33.6% - 43.6%)	0.078	38.0% (30.4% - 45.6%)	70.2% (65.6% - 74.8%)	52.1% (46.9% - 57.3%)	0.000	66.0% (61.4% - 70.5%)	54.8% (49.0% - 60.7%)	0.003	59.8% (56.2% - 63.3%)

* weighted total

4.2.5 Patients with other diseases than diabetes or hypertension

We observed 561 consultations of patients during the endline survey for diseases other than diabetes or hypertension. Of these, 40% (n=222) were conducted in Diber (baseline 32%; n=128) and 60% (n=339) in Fier (baseline 68%; n=272) in Fier. During the base- and endline surveys about half of the observations were conducted in rural locations (baseline 54%; endline 46%).

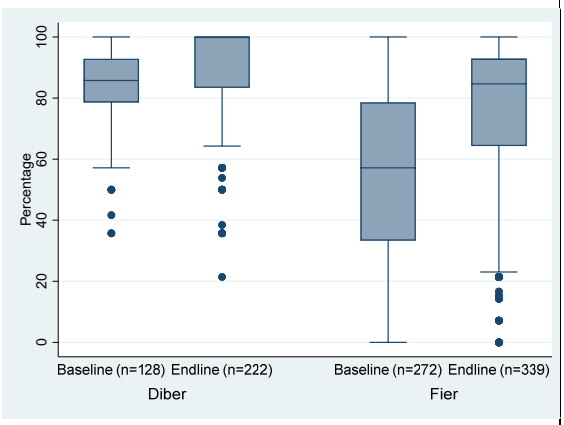
Overall consultations of patients for other diseases achieve higher scores than for diabetes and hypertension. Between the base- and endline an overall improvement is observed: 75% of observations score better than only 50% during the baseline.

As before consultations were by tendency better in Diber than in Fier though the differences between the districts were for other diseases not as distinct.

The endline shows an overall score for other illness of 85% of facilities ranging from 75%-100%, and a few cases scoring between 0% to 25%. Regarding the differences between rural and urban facilities we did not observe major differences although the results still appear statistically significant.

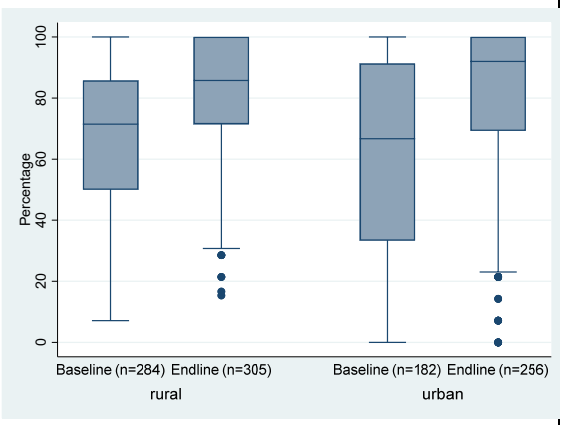
Figure 13: Average score on other illnesses (percent)

Comparison between Diber and Fier



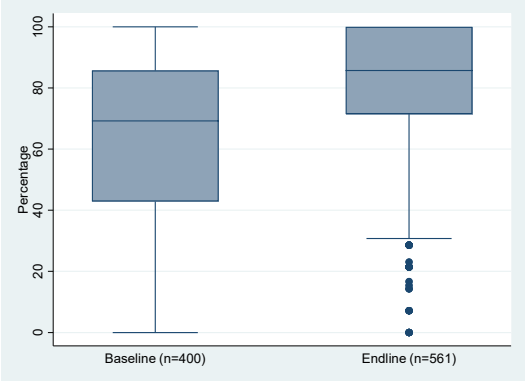
Chi Square test p-value: Baseline = 0.000; Endline = 0.000; Diber = 0.000; Fier = 0.000

Comparison between rural and urban facilities



Chi Square test p-value: Baseline = 0.001; Endline = 0.001; Rural = 0.000; Urban = 0.000

Comparison between the base- and endline



Chi Square test p-value = 0.000

Overall, we observe improvements between base- and endline for both districts. However, changes in the overall weighted average are largely due to positive changes in Fier whilst for

Diber the score was already high during the baseline and thus no large changes were observed during the endline.

Asking questions improved from 71% from the baseline to 86% during the endline. Examinations were provided as required during 82% of cases in the endline compared to 60% of cases during the baseline. Advice and explanations achieved weighted average scores of 75% during the endline and 52% during the baseline. The comparison of average scores on relevant questions, the conduct of examinations and the provision of advice statistically differs between the regions ($p<0.05$). Differences between rural and urban facilities are not statistically significant.

In detail doctors most commonly listened to clients and responded to questions (baseline 91%, endline 96%). This was followed by taking the patient's history (baseline 79%, endline 90%) and asking open ended questions (baseline 76%, endline 91%). Doctors paid least attention to asking whether patients were taking any other prescriptions (baseline 54%, endline 67%). In 83% of cases during endline medical examinations were carried out as required (baseline 77%) and in 81% of cases the patient was given clear explanations regarding the purpose of these tests and procedures (baseline 57%).

The majority of patients were given advice and explanations regarding main aspects (e.g. advised on the results of the examination 82%, and the situation and diagnosis (endline 88%). Patients received least advice about whether a referral was needed (40%) or about any follow-up visit (66%).

For detailed information on the different items please refer to Annex A.1.

Table 7: Average achieved percentage out of all other illnesses

	Baseline							Endline						
	Diber (95% CI)	**Fier (95% CI)**	**T-test p-value**	**Rural (95% CI)**	**Urban (95% CI)**	**T-test p-value**	**Total* (95% CI)**	**Diber (95% CI)**	**Fier (95% CI)**	**T-test p-value**	**Rural (95% CI)**	**Urban (95% CI)**	**T-test p-value**	**Total* (95% CI)**
Asks questions	90.6% (87.8% - 93.5%)	67.6% (63.4% - 71.7%)	0.000	78.9% (75.0% - 82.9%)	71.5% (66.8% - 76.3%)	0.021	71.1% (64.6% - 77.7%)	92.9% (90.5% - 95.3%)	82.7% (80.0% - 85.4%)	0.000	87.9% (85.5% - 90.3%)	85.4% (82.3% - 88.6%)	0.220	86.0% (83.2% - 88.8%)
Conducts examination	95.3% (92.3% - 98.3%)	53.1% (48.4% - 57.9%)	0.000	73.4% (68.4% - 78.3%)	60.9% (55.2% - 66.6%)	0.002	59.7% (52.3% - 67.0%)	96.6% (94.8% - 98.4%)	75.2% (71.4% - 79.0%)	0.000	85.9% (82.7% - 89.1%)	81.1% (76.9% - 85.2%)	0.064	82.1% (78.1% - 86.1%)
Advices, explains and instructs	76.8% (73.7% - 79.9%)	47.0% (43.6% - 50.4%)	0.000	57.9% (54.2% - 61.6%)	55.4% (51.0% - 59.7%)	0.381	51.6% (45.1% - 58.2%)	84.6% (81.8% - 87.4%)	70.2% (67.0% - 73.5%)	0.000	77.3% (74.5% - 80.0%)	74.3% (70.4% - 78.3%)	0.218	74.9% (70.3% - 79.4%)

* weighted total

4.3 Exit Interviews

4.3.1 Respondents socio-economic profile

Overall 776 patients exiting the health facilities during the endline survey were asked to participate in this part of the survey (baseline: n=706). Out of 776 conducted were 41.9% (n=325) in Diber and 58.1% (n=451) in Fier region. This is a shift towards more interviews in Diber compared to the baseline, when only 26% of respondents were from Diber. Similarly, we observed a shift towards less of the interviews being conducted in urban health centres than compared to the baseline (endline: 46.6%; baseline: 66.7%).

The sample consists of 57.0% (439) women and an average age of respondents of 51.6 years (min. 0 years, max. 86 years; median: 56 years). Respondents most commonly had about 8/9 years or 12 years of school education. Participants were most commonly pensioners, followed by being unemployed or a housewife. About 23.8% of participants benefit from economic or social aid (baseline: 15%) and 4.5% belong to an ethnic or linguistic minority (baseline 3%). Hence the socio-economic composition of the base- and endline sample for the exit interviews is quite comparable.

Table 8: Socio-demographic attributes among respondents of exit interviews

	Baseline					Endline				
	Diber % (n)	**Fier % (n)**	**Rural % (n)**	**Urban % (n)**	**Total % (n)**	**Diber % (n)**	**Fier % (n)**	**Rural % (n)**	**Urban % (n)**	**Total % (n)**
Number of interviews	25.9% (183)	74.1% (523)	33.3% (235)	66.7% (471)	100.0% (706)	41.9% (325)	58.1% (451)	53.5% (428)	46.6% (348)	100.0% (776)
Women	53.0% (97)	57.4% (300)	51.9% (122)	58.4% (275)	56.2% (397)	53.5% (174)	58.8% (265)	51.6% (221)	62.6% (218)	57.0% (439)
Urban	52.4% (96)	71.7% (375)	-	-	66.7% (471)	10.9% (104)	35.6% (244)	-	-	46.6% (348)
Average age (SD)	42.3 (25.5)	45.1 (26.8)	39.0 (26.9)	47.3 (25.8)	44.4 (26.5)	50.5 (19.3)	52.2 (21.4)	51.6 (20.3)	51.3 (20.8)	51.5 (20.5)
Education										
-Never attended school	18.6% (34)	12.7% (66)	17.5% (41)	12.6% (59)	14.2% (100)	6.3% (15)	2.0% (7)	5.7% (21)	0.5% (1)	3.5% (22)
-Completed primary school (max. 5 years)	15.3% (28)	10.9 % (57)	15.7% (37)	10.2 % (48)	12.1% (85)	8.0% (19)	12.2% (42)	12.3% (45)	7.4% (16)	10.8% (61)
-Completed compulsory school (max. 8/9 years)	27.9% (51)	30.5% (159)	36.2% (85)	26.7% (125)	29.8% (210)	49.4 % (118)	35.6% (122)	44.5% (163)	35.7% (77)	40.2% (240)
-Completed high school (12 years)	28.4% (52)	28.2% (147)	19.6% (46)	32.6% (153)	28.3% (199)	26.8% (64)	36.4% (125)	29.8% (109)	37.0% (80)	33.2% (189)
-Completed college	3.8% (7)	8.5% (44)	1.3% (3)	10.2 % (48)	7.2% (51)	6.7% (16)	13.4% (46)	6.3% (23)	18.1% (39)	11.2% (62)
-Other	6.0 % (11)	9.2% (48)	9.8% (23)	7.7% (36)	8.4% (59)	2.9% (7)	0.3% (1)	1.4% (5)	1.4% (3)	1.2% (8)
Occupation										
-Farmer	2.7% (5)	3.8% (20)	8.5% (20)	1.1% (5)	3.6% (25)	3.5% (10)	5.4% (21)	6.7% (26)	1.8% (5)	4.6% (31)
-Employed	6.6% (12)	4.4% (23)	2.6% (6)	6.2% (29)	5.0% (35)	9.5% (27)	14.0% (54)	10.3% (40)	14.6% (41)	12.1% (81)
-Self-employed business	2.2% (4)	2.7% (14)	2.1% (5)	2.8% (13)	2.6% (18)	2.5% (7)	2.9% (11)	2.1% (8)	3.6% (10)	2.7% (18)
-Housewife	18.0% (33)	9.4% (49)	17.0% (40)	8.9% (42)	11.6% (82)	15.9% (45)	15.8% (61)	16.2% (63)	15.4% (43)	15.8% (106)
- Governmental employee, teacher	1.6% (3)	2.9% (15)	0.9% (2)	3.4% (16)	2.6% (18)	1.4% (4)	3.1% (12)	1.8% (7)	3.2% (9)	2.4% (16)
-Unemployed	14.8% (27)	11.5% (60)	10.2% (24)	13.4% (63)	12.3% (87)	25.7% (73)	11.9% (46)	20.5% (80)	13.9% (39)	17.8% (119)
-Pensioner	27.3% (50)	35.3% (184)	21.3% (50)	39.2% (184)	33.2% (234)	38.0% (108)	42.2% (163)	38.0% (148)	43.9% (123)	40.5% (271)
-Other	26.8% (49)	30.1% (157)	37.5% (55)	25.1% (118)	29.2% (206)	3.5% (10)	4.7% (18)	4. 6% (18)	3.6% (10)	4.2% (28)
Economic or social aid	21.3% (39)	13.1% (68)	20.0% (47)	12.79 (60)	15.2% (107)	25.6% (83)	22.8% (103)	26.5% (113)	21.0 % (73)	23.8% (186)
Ethnic or linguistic minority	1.7% (3)	3.5% (18)	2.6% (6)	3.2% (15)	3.0% (21)	2.5% (8)	5.5% (25)	6.54% (28)	1.4% (5)	4.5% (33)

4.3.2 Satisfaction with health services

As during the baseline most of the patients in the endline survey had visited this health facility for 1-3 times in the past three months (1-3 times 75%; more than 3 times 24%). This might also be due to the reasons for the visit which were most commonly chronic conditions (baseline 40%, endline 49%) followed by conditions not further categorised (baseline 35%, endline 40%) or related to child health (baseline 19%, endline 8%). Less often were the facilities visited for antenatal care (both evaluations 2%) or immunisation (baseline 4%, endline 2%).

Table 9: Frequency and reason of visit of exit interviews

	Baseline					Endline				
	Diber % (n= 183)	Fier % (n= 523)	Rural % (n=235)	Urban % (n= 471)	Total % (n=706)	Diber % (n= 325)	Fier % (n= 451)	Rural % (n=428)	Urban % (n=348)	Total % (n=776)
Excluding today: How often did you over the past 3 months access this HC?										
did not access this HC in the past 3 months	26.8%	10.3%	21.3%	11.3%	14.6%	0.3%	0.7%	0.0%	1.2%	0.5%
1-3 times	46.5%	58.7%	52.8%	56.9%	55.5%	72.0%	67.4%	75.5%	74.4%	75.4%
more than 3 times	26.8%	31.0%	26.0%	31.9%	29.9%	27.7%	31.9%	24.5%	24.4%	24.0%
What was the reason for your consultation today?										
Chronic condition	31.2%	42.6%	30.2%	44.4%	39.6%	39.7%	53.9%	41.8%	55.5%	49.0%
Antenatal care	0.6%	2.1%	2.6%	1.3%	1.7%	0.9%	2.2%	0.7%	2.9%	1.8%
Child health	19.7%	19.1%	23.4%	17.2%	19.3%	9.2%	6.7%	5.8%	10.2%	7.5%
Immunisation	5.5%	3.6%	7.2%	2.6%	4.1%	1.9%	2.2%	2.6%	1.4%	2.1%
Other	43.2%	32.5%	36.6%	34.6%	35.3%	48.3%	35.0%	49.2%	30.2%	39.6%

When patients were asked about their overall satisfaction with the services received at the day 69% indicated they were very satisfied and 26% were satisfied. About 4% indicated overall that they were very unsatisfied with the services received, whilst the proportion of very unsatisfied patients was substantially higher in Diber (10%) than in Fier (1%). Also, a difference between urban and rural facilities is seen: Patients in urban facilities declare themselves more satisfied that in rural facilities.

Table 10: Overall satisfaction with services received

	Diber % (n)	Fier % (n)	p-value****	Rural % (n)	Urban % (n)	p-value****	Total* % (n)
Very unsatisfied	9.9% (32)	1.1% (5)	0.000	6.3% (27)	2.9% (10)	0.000	4.1% (37)
Unsatisfied	1.2% (4)	0.4% (2)		0.9% (4)	0.6% (2)		7.1% (6)
Satisfied	27.4% (89)	25.1% (113)		31.3% (134)	19.5% (68)		35.9% (202)
Very satisfied	61.5% (200)	73.4% (331)		61.5% (263)	77.0% (268)		69.3% (531)

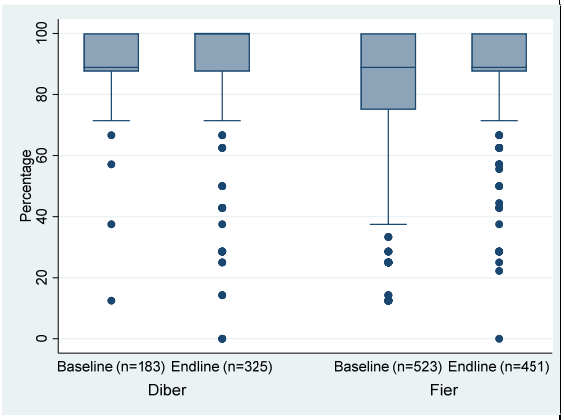
Further, we calculated the satisfaction as an additive index, i.e. calculating the number of services the patient was satisfied with out of the total number of services the patient could have been satisfied with. The achieved score per patient is displayed in box plots as percentage score.

Overall high levels of satisfaction were observed. This is also indicated in the boxplots where limited variation is observed between the base- and endline, the regions and urban vs. rural (see Figure 14). Despite this, differences appear statistically significant for all comparisons. This shows that improvements across time and across the different sub-groups are being observed. In other words: patient satisfaction, calculated across the various items has been increasing between base- and endline overall and for the regions.

However, endline patient satisfaction on PHC services looks higher, especially for services related to antenatal care (although there was a low number of patients participating in both evaluations), and child care. Patient satisfaction at endline vary from 85% to 100%.

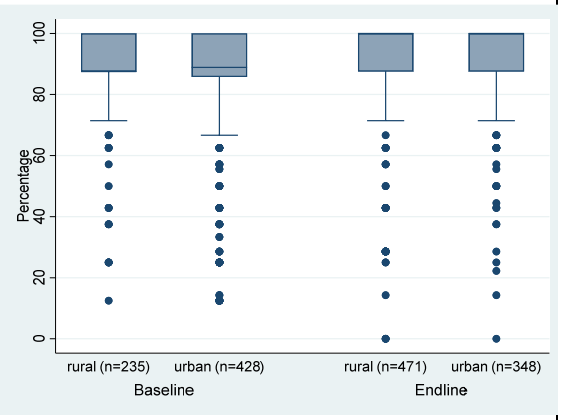
Figure 14: Average satisfaction score by region and location (percent)

Comparison between Diber and Fier



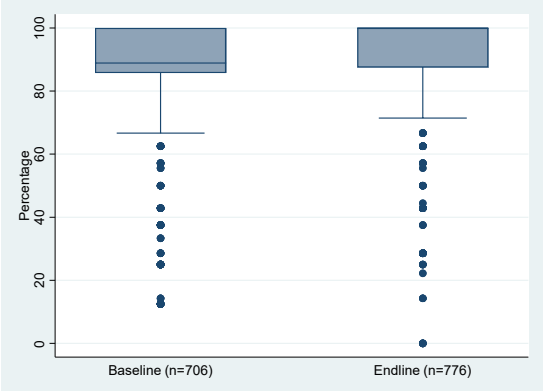
Chi Squared Test p-value: Baseline = 0.000; Endline = 0.001; Diber = 0.000; Fier = 0.000

Comparison between rural and urban facilities



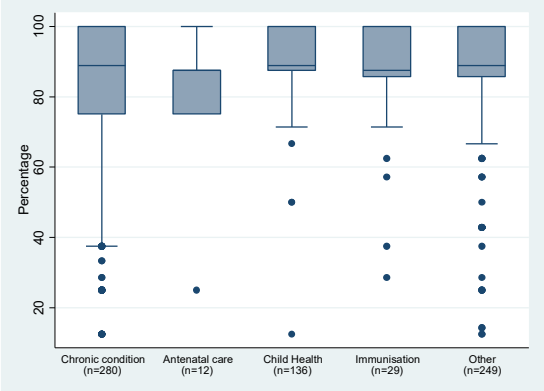
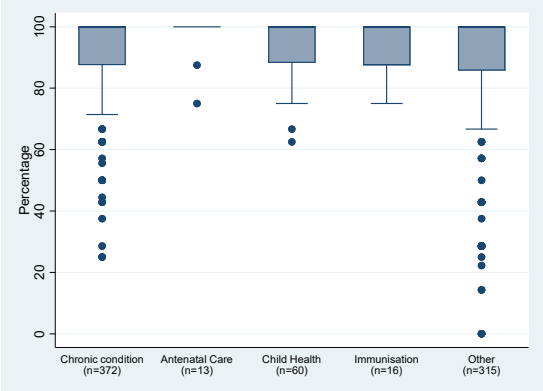
Chi Squared Test p-value: Baseline = 0.003; Endline = 0.000; Rural = 0.000; Urban = 0.019

Comparison between the base- and endline



Chi Squared Test p-value = 0.000

Figure 15: Average satisfaction score by reason of visit (percent)

Comparison between reasons for visits (Baseline)	Comparison between reasons for visits (Endline)
	
Chi Squared Test p-value = 0.000	Chi Squared Test p-value = 0.427

Like in the baseline we found high satisfaction patterns across the various aspects ranging between 80% and 90%. However, only 63% of patients (baseline: 48%) declared that the doctor had asked them whether they are taking any other prescriptions.

For some items we found significant differences between the regions with markedly lower agreement levels than in the comparative region for three items: patients' privacy was ensured (Diber 98%; Fier 95%); the medical doctor was polite during consultation (Diber 96%; Fier 99%) and the already mentioned questioning of taking other prescriptions (Diber 70%; Fier 59%). Similarly, we observe about three items for which we identify statistically significant differences between rural and urban facilities.

Differences between rural and urban facilities were often not that big even though some appear statistically significant (e.g. patient was given the opportunity to explain the health problem: rural 96% vs. urban 91%).

Table 11: Satisfaction with different aspects of health service - exit interviews

	Baseline							Endline							p-value****
	Diber % (n)	Fier % (n)	p-value****	Rural % (n)	Urban % (n)	p-value****	Total* % (n)	Diber % (n)	Fier % (n)	p-value****	Rural % (n)	Urban % (n)	p-value****	Total* % (n)	
… patient was given the opportunity to explain the health problem	99.5% (182)	90.1% (471)	0.000	95.7% (225)	90.9% (428)	0.021	91.1% (653)	96.0% (312)	94.5% (426)	0.326	94.2% (403)	96.3% (335)	0.176	95.0% (738)	0.037
…patients privacy was ensured	96.2% (176)	88.9% (465)	0.003	88.9% (209)	91.7% (432)	0.228	89.7% (641)	98.5% (320)	95.3% (430)	0.017	94.4% (626(	93.4% (765)	0.419	96.4% (750)	0.000
…doctor explained the questioning and physical examinations and the health problem***	98.0% (144)	96.6% (374)	0.425	97.0% (192)	97.0% (326)	0.972	96.8% (518)	97.7% (252)	96.9% (309)	0.556	98.0% (296)	96.4% (265)	0.228	97.2% (561)	0.824
… doctor explained the intake of prescribed medicine**	98.9% (91)	80.4% (263)	0.000	89.2% (99)	82.8% (255)	0.110	82.1% (354)	95.8% (137)	95.2% (177)	0.768	97.4% (150)	93.7% (164)	0.110	95.4% (314)	0.000
…. doctor asked if patient currently takes prescriptions	36.1% (66)	49.0% (256)	0.003	40.9% (96)	48.0% (226)	0.073	47.5% (322)	69.9% (227)	59.4% (268)	0.003	68.0% (291)	58.6% (204)	0.007	63.0% (495)	0.000
… patient was given chance to ask questions about the investigation, health problem and treatment	97.3% (178)	84.1% (440)	0.000	91.5% (215)	85.6% (403)	0.025	85.6% (618)	90.2% (293)	90.5% (408)	0.885	89.2% (382)	91.7% (319)	0.258	90.4% (701)	0.085
… doctor listened carefully to patients concerns and questions and gave satisfactory answers	97.3% (178)	87.2% (456)	0.000	93.6% (220)	87.9% (414)	0.018	88.3% (634)	92.6% (301)	94.9% (428)	0.188	92.2% (395)	96.0% (334)	0.032	94.1% (729)	0.003
… patient got advice on health problem	96.2% (176)	77.1% (403)	0.000	84.3% (198)	80.9% (381)	0.273	79.2% (579)	89.2% (290)	85.8% (387)	0.159	87.4% (374)	87.1% (303)	0.896	87.0% (677)	0.005
… medical doctor was polite during consultation	99.5% (182)	99.6% (521)	0.769	99.6% (234)	99.6% (469)	0.999	99.6% (703)	96.3% (313)	99.3% (448)	0.003	97.2% (416)	99.1% (345)	0.051	98.3% (761)	0.008

* weighted total; ** of those being prescribed medicine (Baseline n=419; Endline n=329); *** of those being examined (total Baseline n=534; Endline n=577); **** chi-square test

4.3.3 Health insurance and health spending

The availability of valid health insurance among patients exiting the health facilities decreased compared to the baseline. Overall about 84% still had an insurance card compared to the baseline where 90% had an insurance card. At the same time the number of patients paying for their consultation decreased. Only two patients indicated having to formally pay for services received.

We attribute this to a substantial policy change between baseline and endline survey. MoHSP introduced in December 2015 a total gratuity of PHC services, whether the users have or have not any insurance card. That means, patients and consumers do not need a card to get most services for free at PHC level. Only few services, e.g. health check for renewal of driving licence or documents demonstrating the person ability to work, require payments.

Table 12: Health insurance and health spending - exit interviews

	Baseline							Endline							p-value**
	Diber % (n)	Fier % (n)	p-value**	Rural % (n)	Urban % (n)	p-value**	Total* % (n)	Diber % (n)	Fier % (n)	p-value**	Rural % (n)	Urban % (n)	p-value**	Total* % (n)	
Availability of valid health insurance card	94.5% (173)	89.9% (470)	0.057	81.7% (192)	95.8% (451)	0.000	90.0% (643)	88.3% (287)	81.4% (367)	0.009	76.6% (328)	93.7% (326)	0.000	83.7% (654)	0.002
Payment for health consultation	1.6% (3)	1.9% (10)	0.813	1.7% (4)	1.9% (9)	0.846	1.0% (13)	0.0% (0)	0.4% (2)	0.223	0.2% (1)	0.3% (1)	0.883	0.3% (2)	0.000

* weighted total; ** chi square test

4.3.4 Satisfaction with health services among people who receive social or economic aid

Among the exit interviews we analysed differences among people receiving social or economic aid regarding their satisfaction with different aspects of the consultations. During the endline we conducted 186 interviews with patients exiting the facility who declared they receive social or economic aid. However, we identified only one statistical difference between those and the general population: patients who received socio- or economic aid were asked less if they currently take other prescriptions than the general population. All other items were statistically not significant. These findings are in line with the baseline where also no major differences were identified.

Also, regarding the availability of health insurance cards and whether a patient had to pay we identified no differences. This is likely attributable to the generally low number of people who had to pay and the already above mentioned policy changes in health insurance.

Table 13: Satisfaction with different aspects of health service - exit interviews among persons receiving social or economic aid

	Baseline			Endline		
	Not receiving social or economic aid % (n=597)	**Receiving social or economic aid % (n=107)**	**p-value***	**Not receiving social or economic aid % (n=589)**	**Receiving social or economic aid % (n=186)**	**p-value***
… patient was given the opportunity to explain the health problem	92.1%	94.4%	0.413	95.4%	94.1%	0.464
…patients privacy was ensured	91.8%	85.1%	0.026	97.1%	95.2%	0.197
…doctor explained the questioning and physical examinations and the health problem	97.5% (n=435 of 446)	94.2% (n=81 of 86)	0.096	97.0% (n=426 of 439)	97.8% (n=134 of 137)	0.631
… doctor explained the intake of prescribed medicine	84.5% (n=299 of 354)	84.4% (n=54 of 64)	0.986	95.3% (n=244 of 256)	95.9% (n=70 of 73)	0.835
…. doctor asked if patient currently takes prescriptions	45.6%	44.9%	0.893	66.2%	56.5%	0.016
… patient was given chance to ask questions about the investigation, health problem and treatment	87.4%	88.8%	0.696	89.8%	91.9%	0.393
… doctor listened carefully to patients concerns and questions and gave satisfactory answers	89.5%	91.6%	0.501	93.2%	96.2%	0.131
… patient got advice on health problem	81.6%	84.1%	0.530	88.1%	84.4%	0.187
… medical doctor was polite during consultation	99.5%	100.0%	0.462	98.1%	97.9%	0.807

* chi-square test

Table 14: Health insurance and health spending - exit interviews among persons receiving social or economic aid

	Baseline			Endline		
	Not receiving social or economic aid % (n= 597)	**Receiving social or economic aid % (n= 107)**	**p-value***	**Not receiving social or economic aid % (n=589)**	**Receiving social or economic aid % (n=186)**	**p-value***
Do you have a valid health insurance card?	90.1%	96.3%	0.040	82.2%	91.4%	0.003
Did you pay for your health consultation today?	1.8%	1.9%	0.985	0.3%	0.0%	0.426

* chi-square test

5 Discussion & Recommendations

In our QoC assessment we investigated three dimensions: structural attributes, process attributes and outcome attributes, approximated by patient satisfaction. We compared the results of the endline survey to the baseline estimates and across sub-groups (Diber vs. Fier; rural vs. urban).

The observed changes from base- to endline are overall positive. We conclude that overall a number of improvements in respect to quality of care have taken place and that Project HAP contributed within its mandate to these improvements.

Ensuring Quality of Care in Primary Health Care remains an important task, which requires continued substantial investments in infrastructure and training of primary care physicians. Meanwhile some good levels of infrastructure have been achieved there is still important gaps to address. Hygiene remains a main concern. Doctors are committed and have well developed interpersonal skills but the lack of guidance on treatment procedures in primary care settings prevail. Health promotion and education activities are needed that tackle habitual risk factors (e.g. smoking, diet, alcohol). Satisfaction with health services was generally high.

Infrastructure

The infrastructure situation shows substantial improvements regarding critical aspects identified in 2015 (see next table). Specific improvements are seen in the area of overall cleanliness, availability of basic equipment and transparency and public accountability. However, the results are reflecting only the assessment of 38 facilities and the limited amount of health centres renovated by HAP in this sample made comparison showing the direct effects of HAP on infrastructure improvements partially challenging.

Critical findings from baseline	Recommendation(s) resulting from baseline	Implementation effort/progress until endline
Health facilities do not have the infrastructure to fulfil the requirements from MoHSP, e.g. separate waiting rooms.	Reconstructions are needed that reflect the requirements.	The construction of facilities remains a limitation to fulfil the requirements from MoHSP. Also, HAP rehabilitation efforts did address reconstructing facilities.
Waste disposal is a major problem in both regions.	Discuss with national and regional stakeholders how infectious or sharp waste disposal can be implemented regularly and effectively.	Waste disposal (infectious and sharps) in both districts has substantially increased or improved?. Also, the immediate disposal at the facilities has clearly improved whilst the temporary storage at facilities remains a problem.
Minimum hygiene requirements were not respected.	Ensure minimum hygiene standards of facilities: • Physical rehabilitation • Functional washing points must be close to toilets • Functional washing points must be in the consultation rooms • Water and soap are constantly available at all washing points • Ensure that chlorine solutions or other disinfectants for instruments are available • Regular cleaning	Hygiene standards, regarding disinfectants and soap remain a concern. Also, the availability of a functional and clean patient toilet is not yet a given in all facilities.
Lack of transparency and public accountability.	Provide guidance on which information can and should be shown at the facility. Provide guidance on where in the facility the information should be displayed	Transparency has largely increased and key documents such as opening hours etc are visible to patients. Tariffs are less visibly displayed than during the baseline which might be partly attributable to the change in policy that regulates the free visits at the family doctors.
Guidelines and materials are not available.	Specify which national standard diagnosis and treatment guidelines must be available at the level of primary health care facilities. Review and revise relevant national standard diagnosis and treatment guidelines for the primary care context. Distribute relevant national standard diagnosis and treatment guidelines to the health facilities. Keep guidelines accessible to all concerned health staff.	The availability/accessibility of guidelines to relevant staff remains a concern. Whilst guidelines were often available, they were locked away and thus not being used. IEC materials were widely available.
“Basic Package of Services in Primary Health Care” (MoHSP, 2014) minimum equipment, material and drugs are often not available.	Identify critical aspects that hinder the availability of adequate equipment, material and drugs. Provide basic equipment as outlined in the list. Ensure health staff are aware how to use the equipment and in which situations Develop and discuss a plan with national stakeholders on replacement or repairs for equipment that is faulty. Discuss the procurement of drugs and procure drugs.	The availability of basic equipment has substantially improved which is largely attributable to the distribution of doctors’ bags by Project HAP. The availability should have been further increased by the distribution of nurse bags after data collection in November / December 2018. During this data collection we did not regularly find basic equipment that was available but not functional. For advanced equipment, specifically gynaecological equipment or delivery sets this was more common. Availability of basic drugs has improved, though not all drugs are available at all facilities.

Despite these achievements and progress several challenges remain:

- Health facilities do not have the infrastructure to fulfil the requirements from MoHSP Basic Package of Service, e.g. separate consulting rooms.
- Power cuts remain common and functional generators are not widely available. Heating systems are not common and more than one third of facilities still have no running water out of the tap.
- Although the general electronic equipment situation improved (computer, printer) communication equipment continues to rely largely on private phones of health staff.
- Toilets for patients remain unavailable in more than 40% of visited facilities. Soap and disinfectants are similarly not available.
- Tariffs are no longer as visibly displayed as during the baseline. Part of the reasons might be that policy changes no longer require that patients are insured or pay for visiting the family doctor. Also contact details and opening times are regularly lacking.
- Explicit referral or emergency mechanisms are still not available in almost half of the facilities.
- Feedback mechanisms were typically not available. The common problem was that in almost all cases there was a box in health centres to put in the leaflets/forms of complaints or opinions. However, in many cases the leaflets/forms were missing.
- The availability of guidelines and protocols in facilities remains in both regions extremely low. A common problem was that the guidelines and protocols may be in a locked room such as that of the economist of the health centres, or within a drawer but not available for the doctor to use them.
- The availability of basic equipment has been most significantly improving. However, some doctors were not keeping the bag in the health center, because of safety reasons, and keep selective equipment as per their judgment with them. For this reason, some of the equipment that should be in the HC were not in the moment of data collection. Also, there are some newly appointed doctors in these regions which have not yet received their doctors' bag. Nurse bags had not yet been distributed at the time of data collection. HAP meanwhile distributed around 1180 nurses' bags with diagnostic and treatment instruments, to improve clinical skills and opportunities of nurses while offering health services to the population of the regions. This has likely further improved the equipment situation.
- Gynaecological service equipment is not available for the majority of facilities. Typically, at least one facility which has this equipment can't use it as it is not functional. Delivery sets were rather untypical. If available many were not sterile and/or lacked key equipment. Advanced equipment, during the endline, was commonly available and likely the result of intensive introduction of checkup labs for population screening (launched in December 2014 by MoHSP). Usually the check-up cabinets are installed in the health center, and they are used almost exclusively for check-up programme.
- Equipment to assess and monitor child growth was generally missing.
- The availability of essential medicines remains variable.

Based on the key critical findings the **following recommendations** are derived:

- Ensure the availability of basic utilities in all facilities (power, water, heating) as a minimal standard.
- Where there is insufficient space to identify a consulting room specifically for women/children. Try to ensure that at least one consulting room in each facility is 'child-friendly', including the equipment to assess and monitor child growth.
- Ensure that each facility has a toilet for patients.
- Ensure implementation of hygiene standards specifically, functional washing points close to toilets, functional washing points in the consultation rooms, water and soap constantly available at all washing points, availability of chlorine solutions or other disinfectants for instruments.

- Assist facilities to identify ways to store infectious and sharp waste safely at the facility until pick up for disposal in order to meet the the accreditation standards of PHC facilities
- Ensure that doctors/nurses keep their doctors/nurse bag at the facility and use the procured basic equipment.
- Ensure availability of basic equipment, e.g. like the one provided in the doctors and nurses bags, at all facilities and for all PHC clinical personnel.
- Identify ways for maintenance and distribution of doctors/nurse bags to ensure the sustainability
- Ensure that Protocols and Guidelines are available to doctors in consultation rooms.
- Ensure each facility implements at least one patient/provider feedback mechanism. Consider to replace current paper-based mechanism through digital/electronic solutions.
- Develop and implement either national or local referral mechanisms.

Clinical Consultations

The following table shows the implementation effort/progress achieved since baseline for clinical consultations:

Critical findings from baseline	Recommendation(s) resulting from baseline	Implementation effort/progress until endline
Clinical consultations		
Privacy of clients was not always ensured	Privacy of clients should be ensured by reminding the health staff to carefully pay attention on privacy standards	Privacy and confidentiality has improved and was now in the vast majority of observations ensured.
Infection prevention measures were not always applied	Raise awareness and remind health staff on infection prevention measures	Infection prevention remains a concern and is widely not being adhered too. Basic rule reminders of washing hands after visiting each patient should be displayed maybe all over the examination rooms and should be part of continuing education of GPs and nurses.
The clinical consultations reveal major weaknesses in the conduct of physical examinations	Conduct qualitative assessments on why doctors do not perform the required physical checks Retraining of doctors is essential Provision of checklists for primary care physicians for the most common chronic conditions	Physical examinations were more often conducted than during the baseline. However, specifically for diabetic and hypertensive patients the levels remain low.
Little information is provided for habitual risk factors for chronic conditions	Develop health promotion activities Retraining of doctors is essential Provision of checklists for primary care physicians for key facts on chronic conditions	Habitual factors are typically still not being covered in clinical consultations.

Critical factors that persist in the endline are as follows:

- Basic hygiene principles are not respected. Hand washing with soap is hardly taking place. Also instruments are not decontaminated. Infection prevention and control measures during the clinical consultations remain a main challenge.
- The adherence to general diabetes treatment guidelines has not substantially improved but also not deteriorated. Consultations were best in providing advice followed by asking

questions but did not adequately address habitual factors. Common was the measurement of blood pressure but other examinations were not routinely conducted.
- For hypertension the picture is similar. About half of patients were asked questions or provided advice. Habitual risk factors were still not adequately addressed. Again physical examinations were carried out more often but typically only blood pressure checks were not regularly done.
- Other conditions score substantially better though there is also room for improvement regarding the conduct of examinations and providing advice.

Based on the key critical findings the **following recommendations** are derived:

- Support effective implementation of the "Manual for infectious prevention and control at PHC" and monitor implementation.
- Provide refresher training for clinical staff on infection prevention and control
- Assess the situation of treatment guidelines for family doctors for common chronic conditions and – where missing – promote the development of a package of guidelines on how to advise patients and consumers in relation to NCD prevention and healthy habits in order to improve health care providers knowledge, skills and capacities.
- Assist in distribution of guidelines and provide training for family doctors herefore.
- Counselling on habitual risk factors should be integrated into all clinical consultations, by including health education counselling skills in the varied medical trainings and continuous medical education.

Exit Interviews

As during the baseline the general satisfaction in both regions and between rural and urban locations is high. We also identified 10% very unsatisfied patients in Diber, although we could then later in the varied dimensions of satisfaction not identify specific what the reasons for this dissatisfactions are. Critically low is the questioning of doctor whether patient is taking any other prescriptions.

High satisfaction ratings among patients generally have to be carefully considered as they might not only reflect the "true" value of patients' satisfaction but also be determined by cultural beliefs (e.g. believe in authorities), the lack of knowledge and awareness on what actually would constitute good health services and the fear of negative consequences due to high dependencies (e.g. no alternative health provider).

6 References

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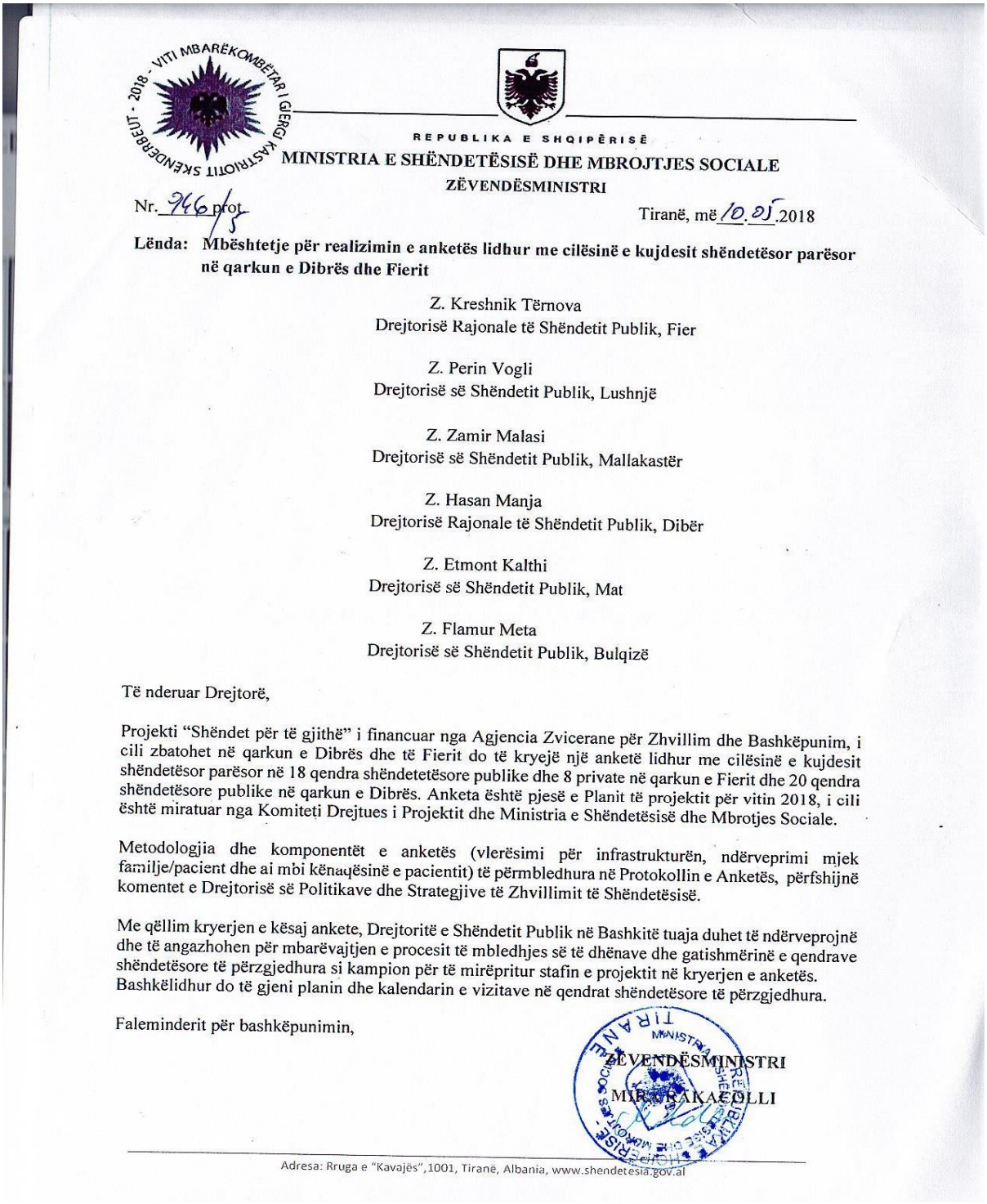
Appendix A: Study Approval letter



REPUBLIKA E SHQIPËRISË
MINISTRIA E SHËNDETËSISË DHE MBROJTJES SOCIALE
ZËVENDËSMINISTRI

Nr. 946 prot
Tiranë, më 10.05.2018

Lënda: Mbështetje për realizimin e anketës lidhur me cilësinë e kujdesit shëndetësor parësor në qarkun e Dibrës dhe Fierit

Z. Kreshnik Tërnova
Drejtorisë Rajonale të Shëndetit Publik, Fier

Z. Perin Vogli
Drejtorisë së Shëndetit Publik, Lushnjë

Z. Zamir Malasi
Drejtorisë së Shëndetit Publik, Mallakastër

Z. Hasan Manja
Drejtorisë Rajonale të Shëndetit Publik, Dibër

Z. Etmont Kalthi
Drejtorisë së Shëndetit Publik, Mat

Z. Flamur Meta
Drejtorisë së Shëndetit Publik, Bulqizë

Të nderuar Drejtorë,

Projekti "Shëndet për të gjithë" i financuar nga Agjencia Zvicerane për Zhvillim dhe Bashkëpunim, i cili zbatohet në qarkun e Dibrës dhe të Fierit do të kryejë një anketë lidhur me cilësinë e kujdesit shëndetësor parësor në 18 qendra shëndetetësore publike dhe 8 private në qarkun e Fierit dhe 20 qendra shëndetësore publike në qarkun e Dibrës. Anketa është pjesë e Planit të projektit për vitin 2018, i cili është miratuar nga Komiteti Drejtues i Projektit dhe Ministria e Shëndetësisë dhe Mbrotjes Sociale.

Metodologjia dhe komponentët e anketës (vlerësimi për infrastrukturën, ndërveprimi mjek familje/pacient dhe ai mbi kënaqësinë e pacientit) të përmbledhura në Protokollin e Anketës, përfshijnë komentet e Drejtorisë së Politikave dhe Strategjive të Zhvillimit të Shëndetësisë.

Me qëllim kryerjen e kësaj ankete, Drejtoritë e Shëndetit Publik në Bashkitë tuaja duhet të ndërveprojnë dhe të angazhohen për mbarëvajtjen e procesit të mbledhjes së të dhënave dhe gatishmërinë e qendrave shëndetësore të përzgjedhura si kampion për të mirëpritur stafin e projektit në kryerjen e anketës. Bashkëlidhur do të gjeni planin dhe kalendarin e vizitave në qendrat shëndetësore të përzgjedhura.

Faleminderit për bashkëpunimin,

ZËVENDËSMINISTRI
MIRA RAKACOLLI

Adresa: Rruga e "Kavajës",1001, Tiranë, Albania, www.shendetesia.gov.al

Appendix C: Data Collection Schedule

#	Municipality	Health Centre	Address	Location Urban/Rural	No of data collection day	Teams	Date
1	Peshkopi	Peshkopi- Bashki	Peshkopi	Urban HC	1	T1	19 July 2018
	Peshkopi	*Peshkopi- Bashki*	*Peshkopi*	Urban HC	1	T2	19 July 2018
	Peshkopi	*Peshkopi- Bashki*	*Peshkopi*	Urban HC		T2	20 July 2018
2	Peshkopi	Arras	Peshkopi	Rural HC	1	T1	24 July 2018
	Peshkopi	Arras	Peshkopi	Rural HC	1	T1	31 July 2018
3	Peshkopi	Kastriot	Peshkopi	Rural HC	1	T1	30 July 2018
	Peshkopi	Kastriot	Peshkopi	Rural HC	1	T2	31 July 2018
4	Peshkopi	Lure	Peshkopi	Rural HC	1	T1	28 July 2018
	Peshkopi	Lure	Peshkopi	Rural HC	1	T1	03 August 2018
5	Peshkopi	Maqellarë	Peshkopi	Rural HC	1	T1	21 July 2018
	Peshkopi	Maqellarë	Peshkopi	Rural HC	1	T1	26 July 2018
6	Peshkopi	Melan	Peshkopi	Rural HC	1	T2	21 July 2018
	Peshkopi	Melan	Peshkopi	Rural HC	1	T2	24 July 2018
7	Peshkopi	Sllove	Peshkopi	Rural HC	1	T1	27 July 2018
	Peshkopi	Sllove	Peshkopi	Rural HC	1	T1	01 August 2018
8	Peshkopi	Tomin (qender)	Peshkopi	Rural HC	1	T1	20 July 2018
	Peshkopi	Tomin (qender)	Peshkopi	Rural HC	1	T2	26 July 2018
9	Peshkopi	Zall Dardhe/Zall Rec (te dyja te kombinuara)	Peshkopi	Rural HC	1	T2	23 July 2018
	Peshkopi	Zall Dardhe/Zall Rec (te dyja te kombinuara)	Peshkopi	Rural HC	1	T2	02 August 2018

#	Municipality	Health Centre	Address	Location Urban/Rural	No of data collection day	Teams	Date
10	Mat	Burrel- Bashki	Mat	Urban HC	1	T3	19 July 2018
	Mat	*Burrel- Bashki*	*Mat*	Urban HC	1	T3	21 July 2018
	Mat	*Burrel- Bashki*	*Mat*	Urban HC	1	T3	28 July 2018
	Mat	*Burrel- Bashki*	*Mat*	Urban HC	1	T3	01 August 2018
11	Mat	Derjan	Mat	Rural HC	1	T3	23 July 2018
	Mat	Derjan	Mat	Rural HC	1	T3	06 August 2018
12	Mat	Klos- Bashki	Mat	Urban HC	1	T3	20 July 2018
	Mat	*Klos- Bashki*	*Mat*	Urban HC	1	T3	26 July 2018
	Mat	*Klos- Bashki*	*Mat*	Urban HC	1	T3	27 July 2018
13	Mat	Komsi	Mat	Rural HC	1	T3	24 July 2018
	Mat	Komsi	Mat	Rural HC	1	T3	07 August 2018
14	Mat	Lis	Mat	Rural HC	1	T3	03 August 2018
	Mat	Lis	Mat	Rural HC	1	T3	04 August 2018
15	Mat	Suç	Mat	Rural HC	1	T3	25 July 2018
	Mat	Suç	Mat	Rural HC	1	T3	30 July 2018
16	Mat	Xiber	Mat	Rural HC	1	T3	31 July 2018
	Mat	Xiber	Mat	Rural HC	1	T3	02 August 2018
17	Bulqize	Bulqize- Bashki	Bulqize	Urban HC	1	T1	23 July 2018
18	Bulqize	Fushë Bulqizë	Bulqize	Rural HC	1	T2	28 July 2018
	Bulqize	Fushë Bulqizë	Bulqize	Rural HC	1	T2	30 July 2018
19	Bulqize	Martanesh	Bulqize	Rural HC	1	T1	25 July 2018

#	Municipality	Health Centre	Address	Location Urban/Rural	No of data collection day	Teams	Date
	Bulqize	Martanesh	Bulqize	Rural HC	1	T1	02 August 2018
20	Bulqize	Zerqan	Bulqize	Rural HC	1	T2	25 July 2018
	Bulqize	Zerqan	Bulqize	Rural HC	1	T2	27 July 2018
					27		
21	FIER	Cakran	Cakran	Rural HC	1	T4	19 July 2018
	FIER	Cakran	Cakran	Rural HC	1	T4	28 July 2018
22	FIER	Dërmënas	Dërmënas	Rural HC	1	T4	31 July 2018
	FIER	Dërmënas	Dërmënas	Rural HC	1	T4	01 August 2018
23	FIER	Kuman	Kuman	Rural HC	1	T4	25 July 2018
	FIER	Kuman	Kuman	Rural HC	1	T4	26 July 2018
24	FIER	Libofshë	Libofshë	Rural HC	1	T4	21 July 2018
	FIER	Libofshë	Libofshë	Rural HC	1	T4	27 July 2018
25	FIER	Nr. 1 Fier	Lagja Liri	Rural HC (peri-urbane)	1	T5	02 August 2018
	FIER	*Nr. 1 Fier*	*Lagja Liri*	Rural HC (peri-urbane)	1	T5	03 August 2018
	FIER	*Nr. 1 Fier*	*Lagja Liri*	Rural HC (peri-urbane)	1	T5	06 August 2018
26	FIER	Nr. 2 Fier	Lagja 1Maji	Urban HC	1	T5	19 July 2018
	FIER	*Nr. 2 Fier*	*Lagja 1Maji*	Urban HC	1	T5	20 July 2018
	FIER	*Nr. 2 Fier*	*Lagja 1Maji*	Urban HC	1	T5	21 July 2018
27	FIER	Nr. 3 Fier	Lagja 15 Tetori	Urban HC	1	T5	30 July 2018
	FIER	*Nr. 3 Fier*	*Lagja 15 Tetori*	Urban HC	1	T5	31 July 2018
28	FIER	Patos	Patos	Urban HC	1	T5	07 August 2018
	FIER	Patos	Patos	Urban HC	1	T5	08 August 2018

#	Municipality	Health Centre	Address	Location Urban/Rural	No of data collection day	Teams	Date
29	FIER	Ruzhdie	Ruzhdie	Rural HC	1	T4	02 August 2018
	FIER	Ruzhdie	Ruzhdie	Rural HC	1	T4	03 August 2018
30	FIER	Zharrëz	Zharrëz	Rural HC	1	T4	23 July 2018
	FIER	Zharrëz	Zharrëz	Rural HC	1	T4	24 July 2018
31	LUSHNJE	Divjakë	Divjakë	Urban HC	1	T6	20 July 2018
32	LUSHNJE	Dushk	Dushk	Rural HC	1	T6	02 August 2018
	LUSHNJE	Dushk	Dushk	Rural HC	1	T6	03 August 2018
33	LUSHNJE	Grabian	Grabian	Rural HC	1	T6	31 July 2018
	LUSHNJE	Grabian	Grabian	Rural HC	1	T6	01 August 2018
34	LUSHNJE	Karbunare	Karbunare	Rural HC	1	T6	25 July 2018
	LUSHNJE	Karbunare	Karbunare	Rural HC	1	T6	27 July 2018
35	LUSHNJE	Nr. 1 Lushnje	Lagja Kongresi	Urban HC	1	T6	19 July 2018
	LUSHNJE	*Nr. 1 Lushnje*	*Lagja Kongresi*	Urban HC	1	T6	21 July 2018
	LUSHNJE	*Nr. 1 Lushnje*	*Lagja Kongresi*	Urban HC	1	T6	30 July 2018
36	LUSHNJE	Nr. 2 Lushnje	Lgj.Gafurr Muco	Urban HC	1	T6	26 July 2018
	LUSHNJE	*Nr. 2 Lushnje*	*Lgj.Gafurr Muco*	Urban HC	1	T6	28 July 2018
37	LUSHNJE	Tërbuf	Tërbuf	Rural HC	1	T6	23 July 2018
	LUSHNJE	Tërbuf	Tërbuf	Rural HC	1	T6	24 July 2018
38	MALLAKSTER	Dukas	Ballsh (Qender - Mallakaster)	Urban HC	1	T4	30 July 2018

Appendix D: Percentage scores for each facility

A.1 Diber

	Baseline			Endline		
Facility	**Infrastructure Score (%)**	**Clinical Consultation Score (%)**	**Exit Interview Score (%)**	**Infrastructure Score (%)**	**Clinical Consultation Score (%)**	**Exit Interview Score (%)**
Peshkopi-Bashki (municipality)	43	66	94	55	79	95
Arras	50	74	100	52	68	90
Kastriot	42	47	94	53	73	88
Lure	47	53	80	63	71	93
Maqellarë	39	62	87	62	60	67
Melan	50	65	100	61	89	99
Sllove	47	63	91	75	71	86
Tomin (qender)	29	58	94	70	84	94
Zall Dardhe	33	44	85	49	94	100
Burrel- Bashki (municipality)	51	62	90	76	74	98
Derjan	55	70	97	71	72	97
Klos- Bashki (Municipality)	54	73	87	80	97	96
Komsi	52	78	88	76	78	98
Lis	57	83	89	70	76	91
Suç	54	72	85	69	71	92
Xiber	60	80	94	72	78	100
Bulqize- Bashki (municipality)	41	78	93	51	52	69
Fushë Bulqizë	38	87	88	55	87	98
Martanesh	53	79	88	76	54	84
Zerqan	49	73	87	59	88	97

A.2 Fier

	Baseline			Endline		
Facility	**Infrastructure Score (%)**	**Clinical Consultation Score (%)**	**Exit Interview Score (%)**	**Infrastructure Score (%)**	**Clinical Consultation Score (%)**	**Exit Interview Score (%)**
Cakran	52	50	87	69	59	91
Dërmënas	60	67	92	65	65	89
Kuman	57	50	80	68	68	89
Libofshë	85	71	90	70	74	92
Nr. 1 Fier	59	38	78	75	47	86
Nr. 2 Fier	78	71	94	57	64	91
Nr. 3 Fier	53	35	70	52	51	86
Patos	75	61	94	56	61	88
Ruzhdie	51	45	78	62	86	83
Zharrëz	57	54	90	65	74	85
Divjakë	56	52	82	80	70	93
Dushk	51	56	87	65	75	87
Grabian	56	64	76	63	73	93
Karbunare	68	46	85	75	68	94
Nr. 1 Lushnje	59	23	73	69	77	88
Nr. 2 Lushnje	69	42	90	87	86	93
Tërbuf	63	38	82	62	58	95
Dukas	46	40	73	43	41	86

Appendix B: Detailed Analysis stratified by region

B.1 Infrastructural Assessment

	Baseline				Endline					P-value
Quality of Care Assessment - Infrastructure Assessment	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Rehabilitated % (n=5)**	
Facility infrastructure and overall cleanliness and maintenance										
The facility and immediate surroundings (facility yard, waiting area outside) are free from long grass, paper debris and solid waste.	65.0	55.56	0.741	60.53	70.0	83.33	0.454	76.3	60.0	0.217
The facility has a rubbish bin which is properly used and not overflowing.	35.0	38.9	1.000	36.8	85.0	55.56	0.074	71.1	60.0	0.005
There is a designated waiting room for patients.	70.0	83.3	0.454	76.3	95.0	94.44	1.000	94.7	80.0	0.047
The current waiting area is mopped, free of dust, trash; dirt, spider webs, and generally tidy.	90.0	83.3	0.653	86.8	90.0	94.44	1.000	92.1	80.0	0.711
There is at least one designated consulting room for women.	55.0	55.6	1.000	55.3	65.0	88.8	0.130	76.3	60.0	0.090
There is at least one designated consulting room for children.	20.0	44.4	0.164	31.6	65.0	94.4	0.045	79.0	0.0	0.000
All examination room(s) ensure(s) privacy/confidentiality (door, window blind, curtain).	80.0	94.4	0.344	86.8	95.0	94.4	1.000	94.7	80.0	0.430
All examination rooms are mopped, free of dust, trash; dirt, spider webs, and the rooms are generally tidy.	95.0	94.4	1.000	94.7	100.0	100.0	1.000	100.0	100.0	0.493
All examination rooms are well illuminated.	95.0	83.3	0.328	89.5	100.0	94.4	1.000	92.1	100.0	1.000
The facility has electricity	95.0	100.0	1.000	97.4	100.0	94.4	0.474	97.4	100.0	1.000
Thereof: During the past 7 working days, did you have any power cuts of more than 1 hour during opening hours.**	26.3	11.1	0.405	18.9	35.00	64.7	0.103	48.7	100.0	0.007
Is there routinely a time of year when this facility has a severe shortage or lack of power?	26.3	44.4	0.313	35.1	20	35.3	0.460	27.0	100.0	0.616
If yes, SPECIFY:	text	text	text	text	text	text	text	text	text	text
The facility has a functional generator	0.0	5.6	0.474	2.6	0	11.1	0.218	5.3	20.0	1.000
Thereof: If the health facility has a functional generator: is fuel available today for the generator?***	n/a	100.0	n/a	n/a	n/a	100.0	n/a	n/a	100.0	n/a
The facility has a functional heating system.	100.0	38.9	0.000	71.1	15.0	55.6	0.016	34.2	80.0	0.003
If yes, SPECIFY:	text	text	text	text	text	text	text	text	text	text

	Baseline				Endline					P-value
Quality of Care Assessment - Infrastructure Assessment	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Rehabilitated % (n=5)**	
Has the facility a functional communication equipment (functional landline telephone or cell phone) available (either private phone or facility phone)?	100.0	44.4	0.000	73.7	80	66.7	0.468	73.7	80.0	1.000
Thereof: What type of phone do you have available?										
Private cell phone of staff	100.0	100.0	n/a	100.0	100.0	66.7	0.024	85.7	75.0	0.111
Cell phone of facility	5.0	0.0	0.520	3.57	18.8	25.0	1.000	21.4	50.0	0.101
Landline of facility	5.0	62.5	0.001	21.4	6.3	25.0	0.285	14.3	0.0	0.729
The facility has functional computer.	45.0	94.4	0.001	68.4	80.0	100.0	0.107	89.5	80.0	0.047
The facility has a functional printer.	25.0	88.9	0.000	55.3	65.0	94.4	0.045	79.0	80.0	0.050
The administration shelf is filed and in order.	85.0	94.4	0.606	89.5	90.0	100.0	0.488	94.7	80.0	0.674

* Fisher's exact; ** n=37; *** n=1

	Baseline				Endline					P-value
Hygiene	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Rehabilitated % (n=5)**	
There is running water in the facility (out of the tap).	60.0	66.7	0.745	63.2	55.0	77.8	0.182	65.8	80.0	1.000
There is warm water available (out of the tap).	8.3	33.3	0.317	20.8	9.1	71.4	0.004	44.0	75.0	0.128
Is there routinely a time of year when this facility has a severe shortage or lack of water (out of the tap)?	75.0	41.7	0.214	58.3	36.4	7.1	0.133	20.0	75.0	0.009
If yes, SPECIFY when:	text	text	text	text	text	text	text	text	text	text
Thereof: If yes: In case there is a severe shortage or lack of water (out of the tap), where do you fetch water?	Multiple	Multiple	Multiple	Multiple	Multiple	Multiple	Multiple	Multiple	Multiple	Multiple
If other, please SPECIFY:	text	text	text	text	text	text	text	text	text	text
Functional washing points exist in examination rooms and/or entrance hall, and soap or hand disinfectants and water are available.	25.0	66.7	0.021	44.7	55.0	72.2	0.328	63.2	100.0	0.167
Labelled containers for medical waste disposal are available in all required areas (e.g. examination rooms).	15.0	38.9	0.144	26.3	80.0	55.6	0.164	68.4	40.0	0.000
The facility has adequate and safe disposal of sharps (sharps box/container).	15.0	83.3	0.000	47.4	95.0	100.0	1.000	97.4	100.0	0.000
The facility has adequate and safe disposal of infectious waste.	10.0	66.7	0.001	36.8	85.0	100.0	0.232	92.1	60.0	0.000
Infectious waste is temporary stored at a protected place.	65.0	83.3	0.278	73.7	65.0	88.8	0.130	76.2	60.0	1.000
Sharps waste is temporary stored at a protected place.	65.0	83.3	0.278	73.7	85.0	88.9	1.000	86.8	100.0	0.249
There is regular and appropriate collection for infectious waste.	50.0	61.1	0.532	55.3	85.0	88.9	1.000	86.8	60.0	0.005
There is regular and appropriate collection for sharps waste.	50.0	61.1	0.532	55.3	90.0	88.9	1.000	89.5	80.0	0.002
The facility has essential disinfectants and antiseptics.	45.0	83.3	0.020	63.2	95.0	88.9	0.595	92.1	100.0	0.005

	Baseline				Endline					P-value
Hygiene	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Rehabilitated % (n=5)**	
The facility has chlorine solution or other disinfectants to disinfect contaminated instruments in all required areas (e.g. in examination rooms).	40.0	44.4	1.000	42.1	65.0	50.0	0.512	57.9	80.0	0.251
The facility has at least one accessible and functional toilet for patients.	30.0	38.9	0.734	34.2	65.0	50.0	0.512	57.9	100.0	0.065
The facility has at least one accessible and functional toilet for staff.	100.0	83.3	0.097	92.1	90.0	83.3	0.653	86.8	100.0	0.711
The toilet(s) or latrine is clean.	85.0	72.2	0.438	79.0	85.0	72.2	0.438	79.0	100.0	1.000
A washing point is available near the toilet or latrine.	65.0	77.8	0.485	71.1	80.0	83.3	1.000	81.6	100.0	0.419
Soap and water are available at the washing point near toilet or latrine.	65.0	66.7	1.000	65.8	75.0	61.1	0.489	68.4	80.0	1.000

* Fisher's exact

	Baseline				Endline					P-value
Public accountability/transparency	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Rehabilitated % (n=5)**	
Is the facility location visible displayed in public?	80.0	94.4	0.344	86.8	85.0	77.8	0.687	81.6	100.0	0.754
Are the facility opening hours visibly displayed to the public?	80.0	100.0	0.107	89.5	75.0	72.2	1.000	73.7	80.0	0.137
Is a contact phone number visibly displayed to the public?	50.0	33.3	0.342	42.1	50.0	22.2	0.101	36.8	20.0	0.815
Are the tariffs visibly displayed to the public/patients?	80.0	88.9	0.663	84.2	55.0	44.4	0.746	50.0	40.0	0.003
Are the green numbers to denounce corruption visibly displayed to the public?	0.0	11.1	0.218	5.3	80.0	77.8	1.000	79.0	80.0	0.000
Is information on the violation of law against tobacco and/or the movement "Albania says no to tobacco" visibly displayed to the public?	90.0	94.4	1.000	92.1	75.0	50.0	0.179	63.2	60.0	0.005
Is information on the "Basic check up for the population for the population 40-65 years old" visibly displayed to the public?	30.0	100.0	0.000	63.2	85.0	94.4	0.606	89.5	100.0	0.014
Is the "Albanian Charter of Patient's Rights" visibly displayed to the public?	30.0	72.2	0.022	50.0	95.0	77.8	0.170	86.8	100.0	0.001
Do any of the leaflets/posters at the facility have a logo/trademark from a pharmaceutical company?	55.0	50.0	1.000	52.6	30.0	0.0	0.021	15.8	100.0	0.001
Does the facility have a box/book to get public opinion on the quality of services?	35.0	38.9	1.000	36.8	40.0	11.1	0.067	26.3	20.0	0.460
Does the facility have mechanisms to facilitate referral of emergency patients to the next level?	20.0	33.3	0.468	26.3	45.0	66.7	0.210	55.3	40.0	0.019
When was the last supervisory visit by the health insurance fund?	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date

* Fisher's exact

	Baseline				Endline					P-value
Guidelines	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Rehabilitated % (n=5)**	
Guideline of Clinical Practice "Antenatal Care in primary health care" (June 2014)	0.0	22.2	0.041	10.5	10.0	5.6	1.000	7.9	0.0	1.000
The Protocols of Clinical Practice "Antenatal Care in primary health care" (June 2014)	5.0	38.9	0.016	21.1	15.0	33.3	0.260	23.7	20.0	1.000
Guideline of Clinical Practice "Postnatal Care in primary health care – For mothers and newborns" (June 2014)	5.0	27.8	0.083	15.8	20.0	11.1	0.663	15.8	0.0	1.000
The Protocols of Clinical Practice on Postnatal Care in primary health care (June 2014)	20.0	50.0	0.087	34.2	25.0	33.3	0.724	29.0	40.0	0.805
Guideline of Clinical Practice "Growth & Development of Children 0-6 age in the primary health care" (June 2014)	0.0	22.2	0.041	10.5	25.0	11.1	0.410	18.4	0.0	0.516
The Protocols of Clinical Practice on the Growth and Development of Children 0-6 age in the primary health care "Following Child's Growth according to Growth Charts" (June 2014)	25.0	50.0	0.179	36.8	30.0	33.3	1.000	31.6	40.0	0.809
Guideline of Clinical Practice "Nutrition of Pregnant Woman, infant and little child in primary health care" (June 2014)	0.0	16.7	0.097	7.9	10.0	0.0	0.488	5.3	0.0	1.000
The Protocols of Clinical Practice on the Nutrition of of Pregnant Woman, infant and little child in primary health care" (June 2014)	5.0	16.7	0.328	10.5	15.0	22.2	0.687	18.4	20.0	0.516
Guideline of Clinical Practice for Seniors	5.0	33.3	0.038	18.4	15.0	33.3	0.260	23.7	20.0	0.779
The Protocols of Clinical Practice of family medicine based on the guidelines for Seniors	5.0	27.8	0.083	15.8	10.0	27.8	0.222	18.4	0.0	1.000
IEC Material	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Rehabilitated % (n=5)**	**P-value**
The Calendar of health promotion developed by MOHSP or IPH	20.0	16.7	1.000	18.4	35.0	33.3	1.000	34.2	20.0	0.192
The Calendar of Vaccination/Immunization	85.0	100.0	0.232	92.1	90.0	88.9	1.000	89.4	100.0	1.000
Awareness materials (posters, leaflets) (when counseling) based on standard package info (children, adults, women and reproductive health, seniors, mental health)	90.0	100.0	0.488	94.7	100.0	77.8	0.041	89.5	100.0	0.337

* Fisher's exact

	Baseline				Endline					P-value
Does the facility have the following basic/essential medical equipment and supplies and are they functional?	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Rehabilitated % (n=5)**	
General medical equipment										
Microsurgery	65.0	83.3	0.278	73.8	60.0	44.4	0.516	52.6	40.0	0.095
Nebulizer	25.0	61.1	0.047	42.1	55.0	66.7	0.522	60.5	60.0	0.168
Ambu mask	35.0	77.8	0.011	55.6	85.0	83.3	1.000	84.2	100.0	0.012
Strong source of light in good condition (portable)	15.0	44.4	0.074	29.0	55.0	55.6	1.000	55.3	40.0	0.036
Nasal speculum	30.0	16.7	0.454	23.7	60.0	33.3	0.119	47.4	20.0	0.054
Otoscope	60.0	61.1	1.000	60.5	95.0	100.0	1.000	97.4	100.0	0.000
Ophtalmoscope	25.0	27.8	1.000	26.3	90.0	94.4	1.000	92.1	100.0	0.000
Glucometer	60.0	83.3	0.160	71.1	75.0	94.4	0.184	84.2	100.0	0.271
Peak flow meter	5.0	5.6	1.000	5.3	90.0	94.4	1.000	92.1	100.0	0.000
Pen light	50.0	66.7	0.342	57.9	95.0	100.0	1.000	97.4	100.0	0.000
Neurological hammer	55.0	77.8	0.182	65.8	90.0	100.0	0.488	94.7	100.0	0.003
Weight scale for adults	85.0	77.8	0.687	81.6	100.0	100.0	n/a	100.0	100.0	0.012
Weight scale for children (over 2 years old)	40.0	66.7	0.119	52.6	100.0	100.0	n/a	100.0	100.0	0.000
Weight scale for infants and toddlers (up to 2 yers old)	85.0	94.4	0.606	89.5	100.0	100.0	n/a	100.0	100.0	0.115
Stadiometer for grown up children	35.0	66.7	0.103	50.0	100.0	94.4	0.474	97.4	100.0	0.000
Sphygmomanometer for children	5.0	55.6	0.001	29.0	100.0	94.4	0.474	97.4	100.0	0.000
Sphygmomanometer for adults	90.0	100.0	0.488	94.7	100.0	100.0	n/a	100.0	100.0	0.493
Stethoscope for children	55.0	94.4	0.009	73.7	95.0	94.4	1.000	94.7	100.0	0.025
Stethoscope for adults	100.0	100.0		100.0	95.0	100.0	1.000	97.4	100.0	1.000
Obstetrical stethoscope	60.0	83.3	0.160	71.1	90.0	88.9	1.000	89.5	100.0	0.082
Sterilization equipment and anti-septical protocol	40.0	66.7	0.119	52.6	50.0	50.0	1.000	50.0	80.0	1.000
Refrigerator	70.0	94.4	0.093	81.6	70.0	94.4	0.093	81.6	80.0	1.000
Vaccine refrigerator/portable	90.0	100.0	0.488	94.7	90.0	94.4	1.000	92.1	80.0	1.000

	Baseline				Endline					P-value
Does the facility have the following basic/essential medical equipment and supplies and are they functional?	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Rehabilitated % (n=5)**	
Hight meter board for children (up to two years old)	30.0	55.6	0.188	42.1	100.0	100.0	n/a	100.0	100.0	0.000
Meter for height measuring (children over two years of age)	45.0	50.0	1.000	47.4	100.0	100.0	n/a	100.0	100.0	0.000
Thermometer	100.0	100.0	n/a	100.0	100.0	100.0	n/a	100.0	100.0	n/a
Tuning fork	30.0	22.2	0.719	26.3	50.0	44.4	0.757	47.4	60.0	0.095
Table for vision testing	65.0	77.8	0.485	71.1	75.0	77.8	1.000	76.3	40.0	0.795
Ear syringe	10.0	33.3	0.117	21.1	35.0	33.3	1.000	34.2	40.0	0.305
Scissors	95.0	100.0	1.000	97.4	95.0	88.9	0.595	92.1	80.0	0.615
Timer	60.0	72.2	0.506	65.8	50.0	66.7	0.342	57.9	40.0	0.637
Pelvimeter	60.0	88.9	0.067	73.7	75.0	61.1	0.489	68.4	100.0	0.801
Children growth chart	25.0	44.4	0.307	34.2	45.0	72.2	0.112	57.9	60.0	0.065
Fracture rods	0.0	38.9	0.003	18.4	10.0	11.1	1.000	10.5	0.0	0.516
Tongue depressor	95.0	100.0	1.000	97.4	100.0	100.0	n/a	100.0	100.0	1.000

* Fisher's exact

	Baseline				Endline					P-value
Gynaecological service equipment	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Rehabilitated % (n=5)**	
Gynecological bed	15.0	44.4	0.074	29.0	15.0	44.4	0.074	29.0	40.0	1.000
Gynecological instruments	10.0	50.0	0.011	29.0	20.0	50.0	0.087	34.2	60.0	0.805
Oxygen tank (tube)	15.0	50.0	0.035	31.6	40.0	50.0	0.745	44.7	40.0	0.345
Inhalator for salbutamol with the mask and the appropriate dosage instrument	25.0	61.1	0.047	42.1	35.0	38.9	1.000	36.8	40.0	0.815
Vaginal speculum, small size	10.0	22.2	0.395	15.8	25.0	33.3	0.724	29.0	40.0	0.271
Vaginal speculum, medium size	15.0	33.3	0.260	23.7	25.0	33.3	0.724	29.0	40.0	0.795
Vaginal speculum, large size	15.0	22.2	0.687	18.4	40.0	33.3	0.745	36.8	60.0	0.123
Pap smear materials: (brush, spatula, holder)	0.0	22.2	0.041	10.5	10.0	16.7	0.653	13.2	0.0	1.000
Gloves (latex)	85.0	83.3	1.000	84.2	100.0	100.0	n/a	100.0	100.0	0.025
Masks for doctors	55.0	77.8	0.182	65.8	65.0	77.8	0.485	71.1	60.0	0.805

* Fisher's exact

	Baseline				Endline					P-value
Gynaecological service equipment	**Diber %**	**Fier %**	**p-value***	**Total %**	**Diber %**	**Fier %**	**p-value***	**Total %**	**Rehabilitated %**	
Delivery set: available?	60.0 (n=3 of 5)	71.4 (n=5 of 7)	0.679	66.7 (n=8 of 12)	44.4 (n=4 of 9)	100.0 (n=3 of 3)	0.091	58.3 (n=7 of 12)	60.0 (n=3 of 5)	1.000
Delivery set: sterile	100.0 (n=3)	100.0 (n=5)	n/a	100.0 (n=8)	75.0 (n=4)	33.3 (n=3)	0.270	57.1 (n=7)	66.7 (n=2)	0.038
Does the delivery set contain…										
Haemostatic pincette	100.0	100.0	n/a	100.0	100.0	100.0	n/a	100.0	100.0	n/a
Obstetrical forceps	100.0	100.0	n/a	100.0	100.0	100.0	n/a	100.0	100.0	n/a
Scissors	100.0	100.0	n/a	100.0	100.0	100.0	n/a	100.0	100.0	n/a
Sterile cat gut	100.0	0.0	0.090	37.5	100.0	100.0	n/a	100.0	100.0	0.200
Sterile gauze	100.0	100.0	n/a	100.0	100.0	66.7		85.7	66.7	0.467
Umbilical cordon clip	100.0	100.0	n/a	100.0	75.0	100.0		85.7	66.7	0.467
Needles and needle bearer	100.0	100.0	n/a	100.0	75.0	100.0		85.7	66.7	0.467
Anatomic pincette	100.0	100.0	n/a	100.0	100.0	100.0	n/a	100.0	100.0	n/a
Sterile surgical gloves (two pairs)	100.0	100.0	n/a	100.0	100.0	100.0	n/a	100.0	100.0	n/a
Surgical coat	0.0	60.0	0.090	37.5	100.0	100.0	n/a	100.0	66.7	0.619
Oxytocin ampoule (one) + metergine ampoule (one)	33.3	80.0	0.187	62.5	75.0	0.0		42.9	100.0	0.619
Syringes (5 ml, 20 ml)	100.0	100.0	n/a	100.0	100.0	100.0	n/a	100.0	100.0	n/a
Plastic aspiration tubes for newborns	33.3	40.0	0.850	37.5	50.0	33.3		42.9	33.3	1.000
Lydocain (One vial)	100.0	80.0	0.408	87.5	75.0	66.7		71.4	33.3	0.569
Betadine solution (vials)	100.0	100.0	n/a	100.0	100.0	100.0	n/a	100.0	100.0	n/a
Oxytocin (vials)	33.3	40.0	0.850	37.5	0.0	33.3		14.3	33.3	0.569

* Fisher's exact

	Baseline				Endline					P-value
Advanced equipment	**Diber % (n=4)**	**Fier % (n=7)**	**p-value***	**Total % (n=11)**	**Diber % (n=4)**	**Fier % (n=7)**	**p-value***	**Total % (n=11)**	**Rehabilitated % (n=5)**	
EKG machine	0.0	16.7	1.000	11.1	75.0	85.7	1.000	81.8	0.0	0.005
Autoclave	0.0	50.0	0.409	33.3	50.0	57.1	0.485	54.5	0.0	0.370
Photometer	0.0	0.0	n/a	0.0	25.0	42.9	1.000	36.4	0.0	0.094
Centrifuge	0.0	16.7	1.000	11.1	25.0	71.4	0.303	54.5	0.0	0.077

* Fisher's exact

	Baseline				Endline					P-value
Assess and monitor child growth	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Rehabilitated % (n=5)**	
Box of blocks in different colors	0.0	11.1	0.218	5.3	0.0	5.6	0.474	2.6	0.0	1.000
Rattle, small red ball hung in a piece of thread	0.0	11.1	0.218	5.3	0.0	0.0	n/a	0.0	0.0	0.493
Book with simple illustrations or some sheets of color paper with illustrations, i.e. a flower, a girl, a car, a cat, etc.	0.0	5.6	0.474	2.6	0.0	0.0	n/a	0.0	0.0	1.000
Large and thin pencils, sheets of paper for drawings	0.0	5.6	0.474	2.6	0.0	0.0	n/a	0.0	0.0	1.000
Doll	0.0	16.7	0.097	7.9	0.0	0.0	n/a	0.0	0.0	0.240
Hairbrush	0.0	5.6	0.474	2.6	0.0	0.0	n/a	0.0	0.0	1.000
Small plate and spoon	0.0	5.6	0.474	2.6	0.0	0.0	n/a	0.0	0.0	1.000
Cups	0.0	5.6	0.474	2.6	0.0	0.0	n/a	0.0	0.0	1.000
Simple puzzles with 2-3 pieces	0.0	11.1	0.218	5.3	0.0	0.0	n/a	0.0	0.0	0.493
Sheet with stripes and shapes	0.0	5.6	0.474	2.6	0.0	0.0	n/a	0.0	0.0	1.000

* Fisher's exact

		Baseline				Endline					P-value
No.	**Were the following products available the day of the visit?**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Rehabilitated % (n=5)**	
1	Water for injections - 2 ml	45.0	88.9	0.006	65.8	70.0	88.9	0.238	79.0	60.0	0.305
2	Atropin sulphat 0.1% - (1 mg / 1ml)	85.0	77.8	0.687	81.6	95.0	88.9	0.595	92.1	100.0	0.309
3	Dextrose solution 5% - 500 ml *(same with Glucose)* 5% - 500 ml	80.0	50.0	0.087	65.8	90.0	94.4	1.000	92.1	100.0	0.010
4	Dextrose 40% - 10 ml *(same with Glucose (solution for injection 4g/10ml – 10 ml)*	45.0	33.3	0.522	39.5	85.0	100.0	0.232	92.1	80.0	0.000
5	Diazepam - 10 mg /2 ml	100.0	100.0	n/a	100.0	100.0	94.4	0.474	97.4	100.0	0.003
6	Epinephrine *(same with Adrenaline solution for injection 1mg/ml – 1ml)*	10.0	66.7	0.001	36.8	95.00	88.9	0.459	92.1	100.0	0.240
7	Furosemid – 20 mg/2 ml	100.0	100.0		100.0	95.0	100.0	1.000	97.4	100.0	0.000
8	Natrium chloride 0.9% - 10 ml *(same with Sodium chloride solution for injection 85mg/10ml)*	40.0	77.8	0.025	57.9	65.0	72.2	0.734	68.4	40.0	0.000
9	Natrium chloride 0.9% - 500 ml *(same with sodium chloride solution for infusion 9g/1000 ml – 500ml)*	90.0	83.3	0.653	86.8	100.0	83.3	0.097	92.1	100.0	0.001
10	Magnesium Sulphate – 10 ml	65.0	77.8	0.485	71.1	75.0	88.9	0.249	81.6	80.0	0.754
11	Nitroglycerin - 0.5 mg *(Replaced with Nitroglycerine 0.3mg/tab)*	70.0	55.6	0.503	63.1	65.0	94.4	0.045	79.0	80.0	0.206
12	Phytomenadione (*Vitamin K 1% - 1ml)*	55.0	66.7	0.522	60.5	65.0	66.7	1.000	65.8	80.0	0.192
13	Dexamethason - 5 mg *(Dexamethasone sodium phosphate solution for injection 4mg/ml – 1ml)*	75.0	88.9	0.410	81.6	90.0	100.0	0.488	94.7	80.0	0.153
14	Prednisolon (25mg/2ml)	Newly introduced into the list				85.0	61.1	0.096	73.7	80.0	0.801
15	Aminophylin (250mg/10 ml)	Newly introduced into the list				70.0	38.9	0.054	55.3	80.0	0.050
16	Antitetanus serum - 1500 UI	80.0	83.3	1.000	81.6	60.0	55.6	1.000	57.9	60.0	0.005
17	Antivipera serum - 10 ml *(same with vipervenom 5ml)*	80.0	55.6	0.164	68.4	40.0	22.2	0.307	31.6	40.0	0.000
18	Haloperidol *(solution for injection 5mg/ml -1ml)*	Newly introduced into the list				55.0	33.3	0.210	44.7	40.0	0.482
19	Methochopramid - 10 mg / 2 ml	75.0	72.2	1.000	73.7	90.0	88.9	1.000	89.5	100.0	0.002
20	Aspirin 0.5 gr *(Acetylsalicylic acid)*	60.0	88.9	0.067	73.7	75.0	83.3	0.697	79.0	60.0	0.000
21	Morphin sulphate - 15 or 30 mg/mlL *(replaced with Morphine hydrochloride 10mg/ml-1ml)*	10.0	11.1	1.000	10.5	55.0	11.1	0.006	34.2	40.0	0.000

		Baseline				Endline					P-value
No.	**Were the following products available the day of the visit?**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Rehabilitated % (n=5)**	
22	Tramadol hydrochloride (Solution for injection 100mg/2ml – 2ml)	Newly introduced into the list				70.0	66.7	1.000	68.4	60.0	0.003
23	Diclofenac - 50 mg *(Replaced with Diclofenac sodium (Solution for injection 75mg/3ml)*	75.0	88.9	0.410	81.6	90.0	94.4	1.000	92.1	100.0	0.000
24	Salbutamol - 100 mkg/dose (volume pump) or 1-2 MG/ ML (nebulizer)	20.0	44.4	0.164	31.6	70.0	66.7	1.000	68.4	60.0	0.019
25	Dihidroergotamin - 1mg/ml	5.0	11.1	0.595	7.9	35.0	27.8	0.734	31.6	20.0	0.000
26	Papaverin 4% - 1 ml	90.0	94.4	1.000	92.1	100.0	100.0	n/a	100.0	100.0	0.000
27	Oxytocine Solucion për I.M./I.V. injection 10 IU/1ml)	Newly introduced into the list				40.0	33.3	0.745	36.8	40.0	0.000
28	Spiritus aethylicus 70% (same with Alcohol ethylic (70%-100ml/1000ml))	100.0	94.4	0.474	97.4	100.0	100.0	n/a	100.0	100.0	0.054
29	Providon Iodine solution 10g/100ml	90.0	94.4	1.000	92.1	85.0	94.4	0.606	89.5	80.0	1.000
30	Chlorfeniramin (oral antihistaminic)	0.0	22.2	0.041	10.5	25.0	55.6	0.096	39.5	20.0	1.000
31	Silver sulphadiazine (Krem 10mg/g – 50mg)	Newly introduced into the list				35.0	44.4	0.741	39.5	40.0	0.000
32	Hydrocortison - 100mg/2ml	30.0	16.7	0.454	23.7	40.0	33.3	0.745	36.8	40.0	0.032
33	Acetaminophen - 0.5 gr.	35.0	77.8	0.011	55.3	95.0	100.0	1.000	97.4	100.0	0.000
34	Acetaminophen suppost 100mg	Newly introduced into the list				90.0	88.9	1.000	89.5	100.0	0.000
35	Magnesium Sulphate – 10 ml (*replaced with magnesium hydroxide+aluminium hydroxide 400 mg+400 mg/tab*)	65.0	77.8	0.485	71.1	45.0	44.4	1.000	44.7	20.0	0.150
36	Ranitidin 50 mg – 2 ml	70.0	83.3	0.454	76.3	80.0	83.3	1.000	81.9	80.0	0.000
37	Silver nitrate	Newly introduced into the list				25.0	50.0	0.179	36.8	40.0	0.002
38	Atenolol/metoprolol	75.0	88.9	0.410	81.6	80.0	94.4	0.344	86.8	100.0	0.754
39	Nifedipin (10 mg/tab)	Newly introduced into the list				85.0	88.9	1.000	86.8	80.0	0.430
40	Hyoscine butylbromide (Solution for injection 20mg/ml-1ml)	Newly introduced into the list				70.0	77.8	0.719	73.7	60.0	0.249
41	Lanatosid C - 4%/2ml	40.0	83.3	0.009	60.5	60.0	83.3	0.160	71.1	80.0	0.469
42	Amiodaron hydrochloride (200mg/tab)	Newly introduced into the list				50.0	38.9	0.532	44.7	20.0	0.090
43	Folic acid - 5mg	20.0	27.8	0.709	23.7	65.0	44.4	0.328	55.3	40.0	0.019

		Baseline				Endline					P-value
No.	**Were the following products available the day of the visit?**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Diber % (n=20)**	**Fier % (n=18)**	**p-value***	**Total % (n=38)**	**Rehabilitated % (n=5)**	
44	Hydrogen peroxide 3 % 500 ml	90.0	72.2	0.222	81.6	80.0	88.9	0.663	84.2	60.0	0.262
45	Oxygen	20.0	33.3	0.468	26.3	45.0	55.6	0.746	50.0	40.0	0.100
46	Nebulizer or volume pump	20.0	55.6	0.042	36.8	40.0	72.2	0.058	55.3	60.0	0.025
47	Hydrophilic cotton 100 gr	100.0	100.0	n/a	100.0	95.0	55.6	0.007	76.3	80.0	0.002
48	Plastic perfusion system	85.0	94.4	0.606	89.5	100.0	100.0	n/a	100.0	100.0	0.115
49	Plastic syringes + 2 needles 5 ml	85.0	100.0	0.232	92.1	100.0	94.4	0.474	97.4	100.0	0.014
50	Plastic syringes + 2 needles 10 ml	75.0	100.0	0.048	86.8	100.0	94.4	0.474	97.4	100.0	0.003
51	Plastic syringes + 2 needles 3 ml	Newly introduced into the list				95.0	61.1	0.016	79.0	40.0	0.028
52	Thread for stitching wounds	60.0	88.9	0.067	73.7	75.0	72.2	1.000	73.7	80.0	1.000
53	Surgical gloves	85.0	100.0	0.232	92.1	100.0	55.6	0.001	79.0	80.0	0.000
54	Bandages 5 x 5 cm *(Replaced with 10x10)*	95.0	94.4	1.000	94.7	100.0	77.8	0.041	89.5	100.0	n/a*
55	Gauze 1 m	65.0	77.8	0.485	71.1	85.0	83.3	1.000	84.2	80.0	n/a*
56	Bandages adhesive (10x15)	Newly introduced into the list				80.0	44.4	0.042	63.2	60.0	
57	Surgical agraphe	Newly introduced into the list				30.0	11.1	0.238	21.1	20.0	
58	Prochlorperasin - 12.5 mg / ml	25.0	44.4	0.307	34.2	Removed from the list					
59	Contraceptives: oral (COC, POP), Injectables, DIU, Condoms	80.0	77.8	1.000	79.0	Removed from the list					
60	Vitamin A and D	5.0	22.2	0.170	13.2	Removed from the list					
61	Amoxicillin/erythromycin	5.00	38.9	0.016	21.1	Removed from the list					
62	Glycerin	10.0	61.1	0.002	34.2	Removed from the list					
63	Buscopan - 10mg/2ml	95.0	7.8	0.170	86.8	Removed from the list					

B.2 Clinical Observations

	Baseline				Endline			
For which illness is the patient seen?	**Diber % (n=175)**	**Fier % (n=450)**	**p-value***	**Total %** (n=625)**	**Diber % (n=354)**	**Fier % (n=488)**	**p-value***	**Total %** (n=842)**
Hypertension	24.6	30.9		30.1	32.8	23.6		26.7
Diabetes mellitus	2.3	8.7	0.002	7.8	4.5	7.0	0.0075	6.1
Other	73.1	60.4		62.1	62.7	69.5		67.1

* chi-square test; ** weighted total

	Baseline				Endline			
Assessment of an adult diabetes mellitus patient - Does the medical doctor follow the clinical assessment procedures, investigations and treatment guidelines?	**Diber % (n=4)**	**Fier % (n=39)**	**p-value***	**Total %** (n=43)**	**Diber % (n=16)**	**Fier % (n=34)**	**p-value***	**Total %** (n=50)**
Asks questions on the illness about								
… any specific health complaints	100.0	51.3	0.118	53.2	100.0	41.2	0.000	56.2
... general weakness	100.0	38.5	0.031	40.8	93.8	41.2	0.001	54.6
... urine discharge	75.0	20.5	0.045	22.6	81.3	11.8	0.000	29.5
… appetite	50.0	25.6	0.308	26.6	75.0	20.6	0.000	34.4
... eye-sight	25.0	7.7	0.334	8.4	62.5	20.6	0.009	31.3
… visit to opthalmalogist	0.0	2.6	1.000	2.5	6.3	14.7	0.650	12.6
... alcohol	25.0	10.3	0.402	10.8	50.0	17.7	0.040	25.9
... smoking	0.0	5.1	1.000	04.9	50.0	11.8	0.010	21.5
... using other medicine	25.0	25.6	1.000	25.6	68.8	32.4	0.031	41.6
… sedentary way of life	0.0	5.1	1.000	04.9	81.3	29.4	0.001	42.6
… adherence with diabetes treatment	100.0	57.9	0.280	59.6	100.0	68.8	0.019	76.7
Conducts examination…								
… checks blood pressure	100.0	33.3	0.019	35.9	93.8	38.2	0.000	52.4
… weight measurement / calculation of body-mass index	0.0	5.1	1.000	4.9	56.3	0.0	0.000	14.3
… of skin, mucus membranes, nodes of lymph, ears, nose, thyroid glands	0.0	7.7	1.000	7.4	68.8	2.9	0.000	19.7
... of eyes	0.0	2.6	1.000	2.5	18.8	0.0	0.029	4.8
... of chest, auscultation of lungs	0.0	7.7	1.000	7.4	25.0	8.8	0.190	12.9
… auscultation of heart in 5 points	0.0	7.7	1.000	7.4	0.0	5.9	1.000	4.4
... of abdomen, palpation of liver and signs of percussion	0.0	5.1	1.000	4.9	25.0	2.9	0.031	8.6
... perfusion of legs (veins and feeling of legs)	0.0	2.6	1.000	2.5	81.3	2.9	0.000	22.9
… and gives clear explanations to the client concerning the purpose of tests and procedures.	75.0	23.1	0.059	25.1	93.8	44.1	0.001	56.8
Advices, explains, instructs								
… results of examinations	100.0	35.9	0.025	38.4	100.0	55.9	0.001	67.1
... the situation and diagnosis	100.0	51.3	0.118	53.2	100.0	58.8	0.002	69.3
... the prognosis	100.0	33.3	0.019	35.9	87.5	32.4	0.001	46.4

	Baseline				Endline			
Assessment of an adult diabetes mellitus patient - Does the medical doctor follow the clinical assessment procedures, investigations and treatment guidelines?	**Diber % (n=4)**	**Fier % (n=39)**	**p-value***	**Total %** (n=43)**	**Diber % (n=16)**	**Fier % (n=34)**	**p-value***	**Total %** (n=50)**
… about needed examinations	100.0	7.7	0.000	11.2	87.5	38.2	0.002	50.8
… nutrition, i.e. food intake	75.0	12.8	0.016	15.2	87.5	44.1	0.005	55.2
… about smoking	0.0	2.6	1.000	2.5	50.0	11.8	0.010	21.5
… about physical exercise	0.0	10.3	1.000	9.9	68.8	20.6	0.002	32.9
... right ways of care of legs	0.0	7.7	1.000	7.4	68.8	5.9	0.000	21.9
… potential complication of the illness	75.0	8.0	0.034	20.1	93.8	26.5	0.000	43.6
… potential risks if illness is not treated	75.0	18.0	0.034	20.1	87.5	32.4	0.001	46.4
… importance of adherence to treatment	100.0	20.5	0.004	23.6	93.8	44.1	0.001	56.8
... about follow-up visit	100.0	41.0	0.039	43.3	93.8	64.7	0.039	72.1
… about the referral	100.0	20.6	0.057	22.4	50.0	14.7	0.031	23.7
… on prescribed medicines/treatment	33.3	50.0	1.000	49.5	93.3	71.4	0.129	77.6

* Fisher's exact; ** weighted total

	Baseline				Endline			
Assessment of an adult patient with arterial hypertension - Does the medical doctor follow the assessment procedures, investigations and treatment guidelines?	**Diber % (n=43)**	**Fier % (n=139)**	**p-value***	**Total %** (n=182)**	**Diber % (n=116)**	**Fier % (n=115)**	**p-value***	**Total %** (n=231)**
Asks questions on the illness about….								
… any specific health complaints	95.4	59.0	0.000	62.9	94.0	56.5	0.000	72.3
… headache	32.6	26.6	0.449	27.3	76.7	51.3	0.000	62.1
… the use of medicine other than for hypertension	44.2	23.0	0.007	25.3	79.3	66.1	0.024	71.7
... the use of contraceptives	0.0	0.0	n/a	0.0	32.8	0.0	0.000	13.6
... eye-sight	4.7	5.0	0.919	5.0	37.1	7.8	0.000	20.2
… visit to opthalmalogist	2.3	0.7	0.377	0.9	1.7	1.7	0.993	1.7
... alcohol	2.3	5.0	0.449	4.7	15.5	13.9	0.731	14.6
... smoking	0.0	6.5	0.087	5.8	19.8	13.0	0.164	15.9
... using other medicine	18.6	18.0	0.927	18.1	72.4	46.1	0.000	57.2
… sedentary way of life	11.6	14.4	0.646	14.1	51.7	40.9	0.098	45.5
… high blood pressure	29.4	49.2	0.038	47.4	89.6	81.9	0.122	85.8
… adherence with hypertension treatment	93.0	68.9	0.002	71.5	97.4	85.3	0.001	90.6
Conducts examination…								
… checks blood pressure	97.7	76.3	0.002	78.6	92.2	80.9	0.011	85.7
… weight measurement / calculation of body-mass index	0.0	0.7	0.577	0.6	27.6	1.7	0.000	12.7
… of skin, mucus membranes, nodes of lymph, ears, nose, thyroid glands	0.0	6.5	0.087	5.8	23.3	6.1	0.000	13.4
... of eyes	0.0	2.2	0.331	1.9	22.4	7.0	0.001	13.5
... of chest, auscultation of lungs	4.7	18.7	0.026	1.7	28.5	9.6	0.000	17.5
… auscultation of heart in 5 points	11.6	13.7	0.730	13.5	17.2	6.1	0.008	10.8
... of abdomen, palpation of liver and signs of percussion	2.3	5.0	0.449	4.7	8.6	7.0	0.637	7.7
... perfusion of legs (pulse and perfusion of legs)	9.3	1.4	0.012	2.3	38.8	4.4	0.000	18.9
… and gives clear explanations to the client concerning the purpose of tests and procedures.	76.7	30.9	0.000	35.9	83.6	39.1	0.000	57.9
Advices, explains, instructs								
… results of examinations	95.4	63.3	0.000	66.8	93.1	81.7	0.009	86.5
... the situation and diagnosis	95.4	70.5	0.001	73.2	94.8	69.6	0.000	80.2

	Baseline				Endline			
Assessment of an adult patient with arterial hypertension - Does the medical doctor follow the assessment procedures, investigations and treatment guidelines?	**Diber % (n=43)**	**Fier % (n=139)**	**p-value***	**Total %** (n=182)**	**Diber % (n=116)**	**Fier % (n=115)**	**p-value***	**Total %** (n=231)**
... the prognosis	83.7	53.2	0.000	56.5	77.6	37.4	0.000	54.4
… about needed examinations	76.7	19.4	0.000	25.6	82.8	53.0	0.000	65.6
… nutrition, i.e. food intake	9.3	15.1	0.334	14.5	56.0	49.6	0.325	52.3
… about smoking	4.7	5.8	0.781	5.6	20.7	14.8	0.240	17.3
… about physical exercise	11.6	7.2	0.356	7.7	40.5	27.0	0.029	32.7
… potential complication of the illness	51.2	27.3	0.004	29.9	63.8	43.5	0.002	52.1
… potential risks if illness is not treated	62.8	28.1	0.000	31.8	64.7	40.9	0.000	50.9
… importance of adherence to treatment	93.0	38.9	0.000	44.7	85.3	65.2	0.000	73.7
... about follow-up visit	83.7	50.4	0.000	53.9	81.0	73.9	0.195	76.9
… about the referral	10.3	26.9	0.060	25.5	58.3	30.2	0.001	45.2
… on prescribed medicines/treatment	75.6	58.7	0.052	60.6	88.7	76.2	0.016	81.3

* chi-square test; ** weighted total

	Baseline				Endline			
Assessment of a patient with <u>other</u> condition than diabetes or arterial hypertension.	**Diber % (n=128)**	**Fier % (n=272)**	**p-value***	**Total %** (n=400)**	**Diber % (n=222)**	**Fier % (n=339)**	**p-value***	**Total %** (n=561)**
Asks questions on the illness about								
… takes patient history (general history, specific to disease)	96.1	71.0	0.000	74.8	93.2	88.5	0.062	90.0
… asks open ended questions during history taking	93.8	67.3	0.000	71.4	95.1	89.1	0.014	91.0
… asks about any prescriptions the client is currently taking.	75.0	44.1	0.000	48.9	84.7	58.4	0.000	66.9
… listens to the client and responds to client questions.	97.7	87.9	0.001	89.4	98.7	95.0	0.022	96.2
Conducts examination…								
… performs medical examinations and other investigations as individually required.	98.4	66.2	0.000	71.2	97.8	75.8	0.000	82.9
… gives clear explanations to the client concerning the purpose of tests and procedures.	92.2	40.1	0.000	48.1	95.5	74.6	0.000	81.4
Advices, explains, instructs								
… results of examinations	98.4	61.4	0.000	67.1	93.7	77.0	0.000	82.4
... the situation and diagnosis	95.3	64.3	0.000	69.1	96.9	83.5	0.000	87.8
... the prognosis	88.3	37.5	0.000	45.4	77.9	60.8	0.000	66.3
… about needed examinations	85.2	34.6	0.000	42.4	91.9	67.9	0.000	75.6
… about follow-up visit	83.6	31.6	0.000	39.7	73.8	62.8	0.006	66.4
… about the referral	26.6	55.0	0.000	51.5	46.0	36.6	0.018	39.6
… on prescribed medicines/treatment	63.1	50.8	0.038	53.0	84.4	76.5	0.037	79.1
… on risks factors/health education	48.7	42.7	0.283	43.7	82.1	74.1	0.036	76.7

* chi-square test; ** weighted total