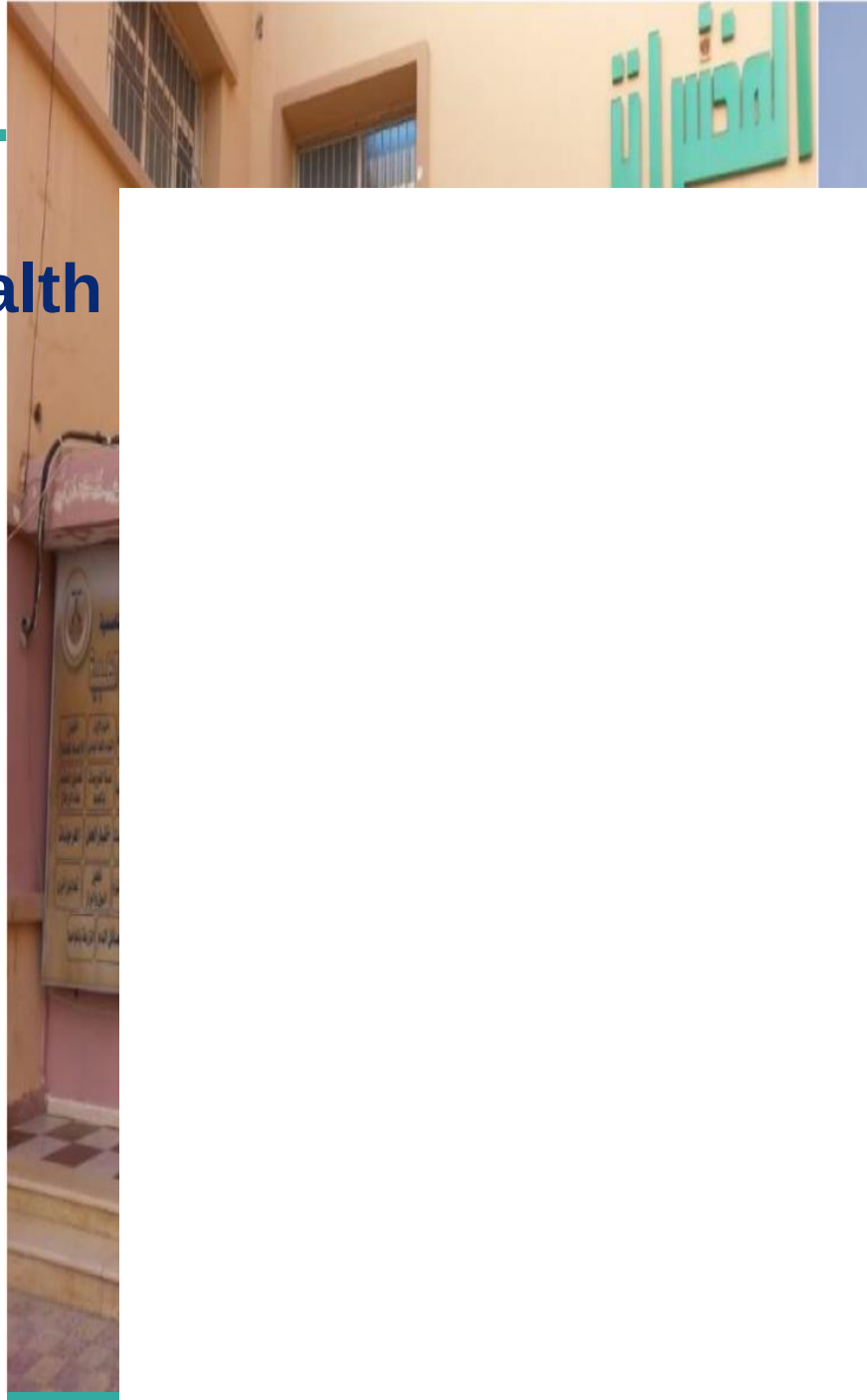

Libya Primary Health Care Survey Analysis

JULY 2018

THE WORLD BANK
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Survey Overview and Methodology

Due to the nature of the Libyan conflict and the need to quickly gather information, a rapid survey of patients and providers at primary health care clinics was executed in March 2018. The primary goal was to collect information that extended beyond infrastructure and service availability, and focused on patient and provider perspectives and the specific issues facing them. The survey tool utilized inputs from the World Bank Group Jordan PHC survey, the RAND Patient Satisfaction Survey (PSQ-18), DHS exit interviews, consultations with MoH and field testing with Ipsos partners.

Patient Survey

The sample design consists of:

- A random selection of health facilities within Tripoli and Benghazi. The random selection is necessary in order to provide a good geographic distribution of facilities in both cities.
- A random intercept of patients. Interviewer teams were assigned a random selection of day-parts to interview patients at selected facilities. Every nth patient exiting the facility was selected to participate in the survey. For some patients without sufficient capacity to complete the survey (such as children), the person companying the patient answered the survey as the respondent on behalf of the patient.
- A goal of completing 40 interviews per 20 facilities, per city.

The random intercept sample design relies on field control and discipline to provide a random sample. The necessary steps below were followed:

- Select a random sample of 20 health facilities, using an every nth facility sampling (systematic selection). Prior to the every nth selection, the list was sorted by facility type. This provides an implicit stratification by facility type.
- Identify days and hours of operations for each selected health facility.
- Randomly select 4 different day & hour-parts of operation for each clinic to provide a time for when interviewing will take place. Random selection of day parts assures no systematic bias for day-of-week or time of day.
- Assign a minimum of two interviewers to intercept and complete interviews for every nth patient exiting the facility during the selected day-part.
- The interviewers will be accompanied by one supervisor or senior interviewer, who will observe the interviewers to assure an every nth process.

During fielding, the sampling design needed to be adapted to accommodate low utilization rates at certain facilities, and therefore an inability to reach the assigned quota of 40 interviews per 20 facilities during the allotted fielding window. To ensure we kept a random selection of facilities and patients while adapting our methodology, the following steps were taken:

- 20 new facilities per city were selected using the same random, systematic sampling approach.
- Interviewers were assigned a random order to visit the facilities (as was done in the original sampling plan), but we moved from a 4 day/hour-part model to half day shifts and 1-2 subsequent revisits of facilities to try and meet the original interview quota.
- The 40 interview/facility quota was relaxed and moved to a "best effort" number of completes within the given time frame to complete the survey.

Provider Survey

For this survey, clinic staff and health providers (excluding the clinic manager, chief officer, and administrative staff) were asked to participate. Prior to the interviewer team arriving at the facility, a letter from the Libyan Ministry of Health was sent (or a phone call was made) to coordinate the interviewing of staff and ensure a good response rate.

The sample design consists of:

- A random selection of health facilities within Tripoli and Benghazi. The random selection is necessary in order to provide a good geographic distribution of facilities in both cities.
- A goal of completing 20 provider interviews per 20 facilities, per city. Staff were to be interviewed either before/after patient day parts or at an alternative, pre-arranged time.

The patient sampling plan adaptations also resulted in some modifications of the provider sample, namely:

- 20 new facilities per city were selected using the same random, systematic sampling approach.
- Interviewer teams were given the option to go to new facilities, even if patient interviews had not been conducted (while still following a random order for facility visits, assigned by Ipsos).
- The 20 interview/facility quota was relaxed and moved to a "best effort" number of completes within the given time frame to complete the survey.

Survey Results

Patient Demographics

In the first round of the rapid primary healthcare facility survey, 1,012 patient interviews were completed across Benghazi (n=510) and Tripoli (n=502) out of the 1,438 patients that were approached.

- 23% of respondents (237 respondents) who answered the survey refused to reveal their nationality. Refusing to reveal nationality was more prevalent in Benghazi (6%) than Tripoli (1%). Those revealed the nationality were mostly Libyan, with just 8% reporting that they were another nationality. How best to address the missing nationality information needs to be considered for future surveys.
- 15% of respondents have either basic or no education.
- The demographics may imply that there are different healthcare needs in Benghazi than in Tripoli, since Benghazi facilities had a higher proportion of children (23%) than in those Tripoli (10%).
- While Tripoli's patients, on average, had a higher income level than Benghazi, non-Libyans that were surveyed had a higher overall average income level than Libyans that were surveyed.

Table 1. Patient demographic information for Benghazi and Tripoli.

	Total	Benghazi	Tripoli
Nationality			
Libyan (%)	96	92	99
Respondent's gender*			
Female	52	51	52
Male	48	49	48
Patient's gender			
Female	55	52	57
Male	45	48	43
Patient's age			
Mean (years)	30	27	33
Under 5 years (%)	16	23	10
Above 60 years (%)	8	8	8
Respondent's education*			
Basic or no education (%)	15	15	16
Patient's education			
Basic or no education (%)	43	45	42
Annual household income (LYD) (%)			
Less than $5,000	21	16	24
$5,000 to $10,000	44	42	46

$10,000 to $15,000	21	17	24
$15,000 to $20,000	7	9	6
$20,000 to $25,000	6	12	0
$25,000 to $30,000	1	3	0
Patient seeking care (%)			
Respondent	58	61	54
Respondent's child	31	27	34
Other child	2	2	2
more than one child	7	6	8
Respondent and another adult	1	2	1
Respondent and a child	1	3	0

* For some patients without sufficient capacity to complete the survey (such as children), the person companying the patient answered the survey as the respondent on behalf of the patient.

Provider Demographics

- 510 provider interviews were completed across both cities, with an 85% response rate.

Table 2. Provider demographic information for Benghazi and Tripoli.

	Total	Benghazi	Tripoli
Completed interviews (N)	510	273	237
Refusals	93	51	42
Response rate (%)	85	84	85
Gender *(includes refusals) (%)*			
Female	66	59	75
Male	34	41	25
Education level (%)			
Secondary school	6	1	12
Certificate (18-24 mo. program)	15	25	3
Associate degree (2 yr. university)	9	11	6
Diploma (3 yr. university)	18	11	25
Bachelor's degree (4-6 yr. university)	46	40	52
Master's degree or higher	6	11	1
Country of medical/nursing degree (%)			
Libya	98	96	99
Others	2	4	1

Patient Access and Utilization

Though patterns were observed, current census data for Tripoli and Benghazi would allow for a better interpretation of access patterns for patients seeking care at public facilities.

- **Over 70% of patients traveled to primary care facilities by car, while 21% walked**. Access through public transport was low. Non-Libyans were more likely to take public transportation,

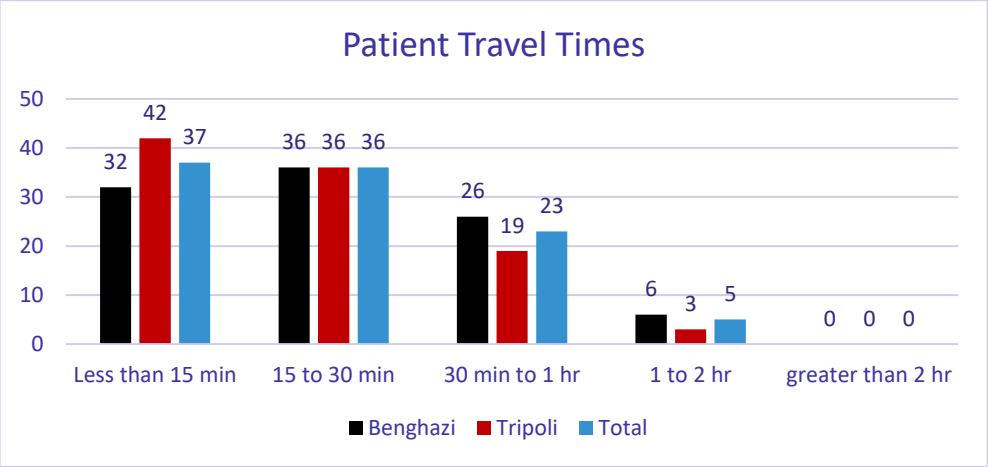
compared to Libyans. Since most patients, regardless of income level, travelled by car, it seems that low-income households may not have issues with access to transportation.

Table 3. Patient transportation to primary health care centers.

Transport	Total	Benghazi	Tripoli
Walk (%)	21	18	24
Public transport (%)	7	9	4
Car (%)	73	73	72

- **The majority of patients (95%) travelled less than 1 hour to reach the clinic**. Non-Libyans have slightly longer travel times than Libyans. It is however unclear what percentage of residents could not access health facilities due to lack of transportation.

Figure 1. Patient travel times to primary care facilities.



- **On average, across both cities, patients wait about 24 minutes before seeing a provider**. Wait times are shorter in Benghazi as compared to Tripoli.
- **Although access to a clinic does not seem problematic, 32% of patients bypassed the nearest clinic when seeking care.** Among those who specified a reason for bypassing the closest clinic, patients cited lack of medical staff and medications as the primary reasons for going to another clinic.

Table 4. Patient reasons for bypassing the nearest clinic.

Reasons	Percentage (%)
Damaged	4
Inaccessible	6
Not enough doctors or nurses	16
Not enough medications	12
Too crowded	9
Not offer the service I need	0
Disrespectful	4
Not specified or other reasons	49

- **Purpose of facility visits differs significantly in Tripoli and Benghazi, implying potential regional differences in primary health care needs.** Across Tripoli and Benghazi, about 56% of patients are visiting facilities for routine visits, and the rest for medical problems. While most routine visits in Benghazi are for immunization and annual physical, over half of all Tripoli 51% of patients visited the center routinely for other reasons. Among those who seek medical treatment, a higher proportion of patients in Benghazi (24%) have chronic conditions than those in Tripoli (13%).

Figure 2. Patient's reasons for routine visits.

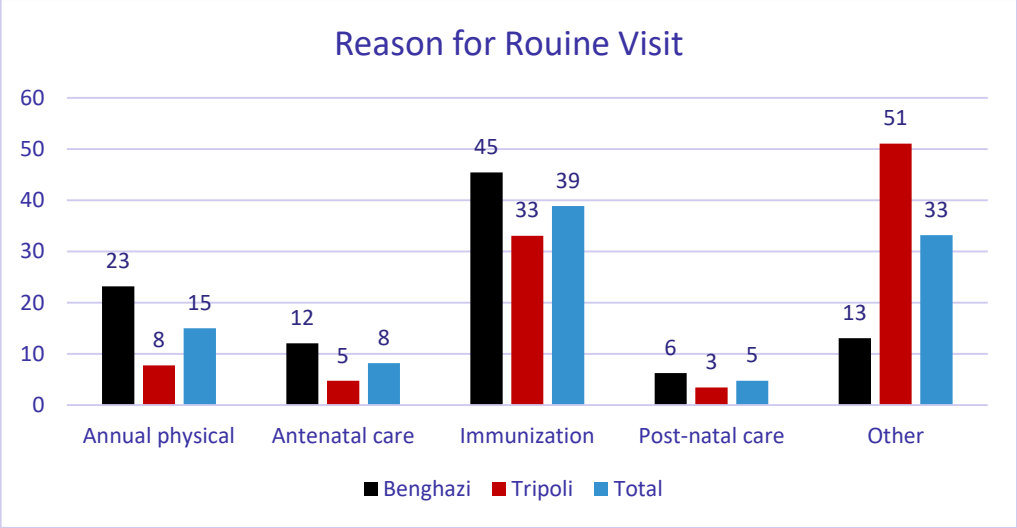
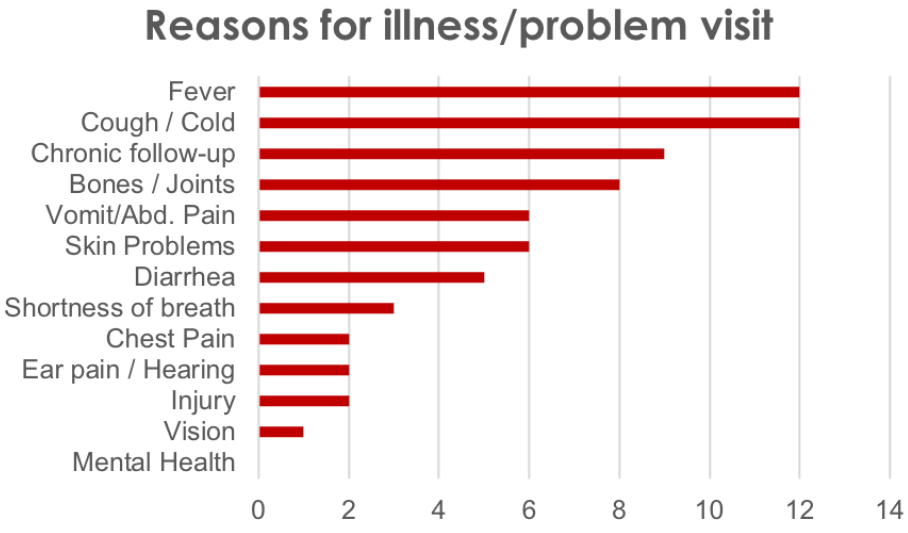


Figure 3. Patients reasons for illness visits in clinics across both Tripoli and Benghazi.



More patients in Benghazi received laboratory tests, imaging tests, medication and referral services compared to Tripoli patients. The differences could be due to many supply and demand factors, such as difference in service capacity, clinical practices, and patients' health

needs. More in-depth information is needed to inform regional capacity planning to meet health care needs.

Table x. Percentage of patients receiving specific services

	Total	Benghazi	Tripoli
Laboratory tests (%)	20	28	13
Imaging (%)	15	27	3
Medications (%)	47	55	39
Referral services (%)	3	5	2
Follow up visits (%)	30	28	33

Patient Out-of-Pocket Costs

- **Although policies require healthcare to be provided for free, 19% of patients in Benghazi and 7% in Tripoli reported paying fees.** This number differs by nationality. Among those who paid a fee, the average payment was 142 LYD (range: 5-2000 LYD).

Table xx. Percentage of patients paying fees

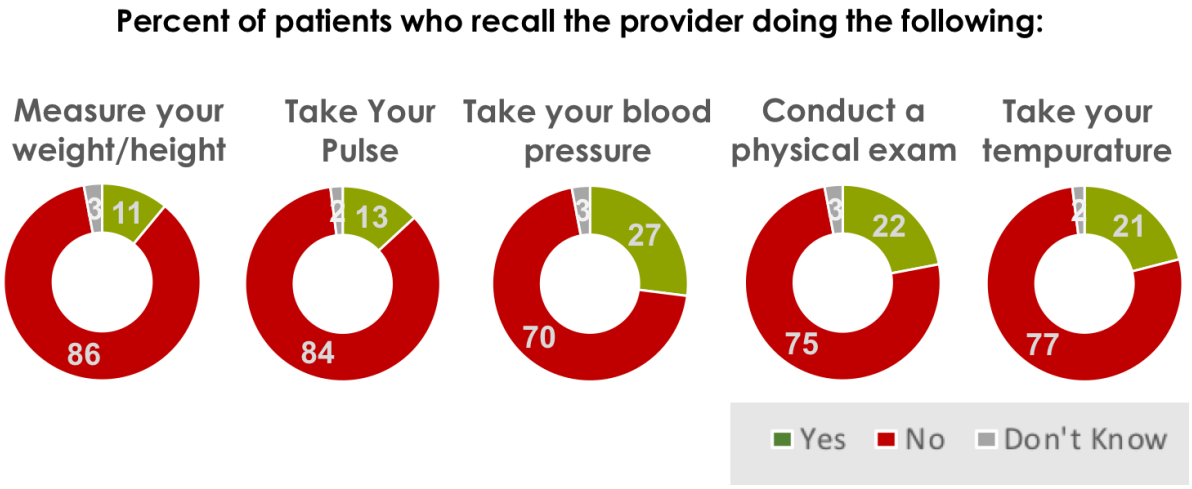
	Benghazi	**Tripoli**
% Libyans paying fees	20	7
% Foreigners paying fees	10	25
% those refused to reveal nationality paying fees	28	14
All patients	19	7

- **Although 13% of patients reported paying fees, 41% of those in Benghazi and 52% in Tripoli considered health costs a problem.** Slightly more non-Libyans (49%) considered cost a problem compared to Libyans (45%). The perception of cost as a problem does not vary by education, and is positively correlated with household income.
- **Most people paying for services more often paid for medication (10%) or consultations (9.5%).** Labs (4%) and imaging (2%) were also among the services for which patients frequently paid.
- **As a result, over 20% of patients reported forgoing treatment due to cost.** This number does not vary significantly by nationality, education level, household income or city.

Patient Service and Satisfaction

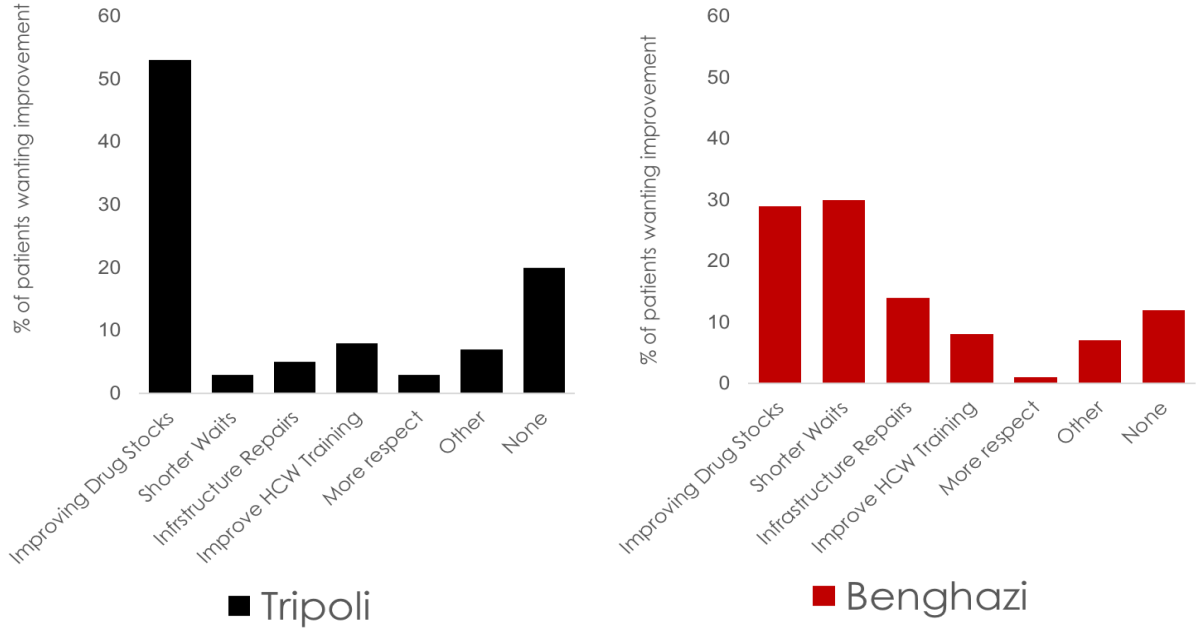
- **Based on patient reports, there are gaps in quality of care.** The majority of patients are not receiving physical exams or having vital signs checked when visiting a primary care clinic.

Figure 4. Patient recollections of basic procedures performed at primary care appointments.



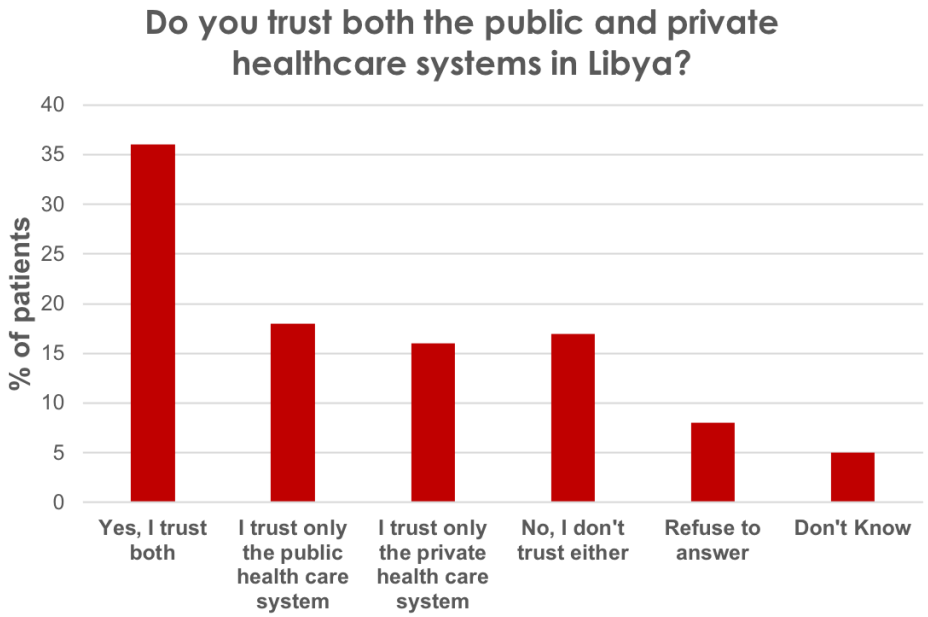
- **Improving drug stocks is a primary concern across both cities, although concerns vary between Tripoli and Benghazi.**

Figure 5. Top improvement priorities for patients in Tripoli and Benghazi.



- **About one third of all patients surveyed do not trust the public healthcare sector**. More patients in Tripoli only trust the public health care sector than those in Benghazi. Patients with higher education levels tend to trust both public and private, whereas patients with lower education level tend to trust public sector more. Foreigners and those who did not reveal their nationality tend to trust both public and private sectors, or have stronger trust for the private sector.

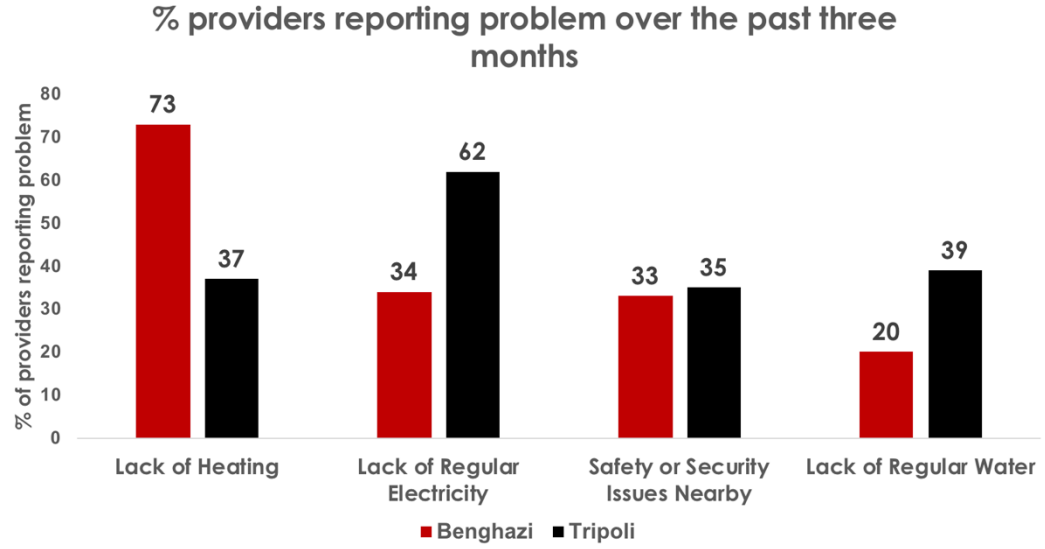
Figure 6. Patient trust in the Libyan healthcare system.



Provider Challenges

- **One-third of providers report that their clinic requires infrastructure repairs or rehabilitation.** Providers in Tripoli (45%) are more likely to report that their facility needs repairs as compared to providers in Benghazi (26%).
- **While lack of heating is the primary concern for Benghazi providers and lack of electricity for providers in Tripoli, infrastructure concerns vary between the two cities.** Providers in both cities also cited lack of regular clean water and security issues as a primary concern.

Figure 7. Providers reporting infrastructure problems that have affected their work in the past three months.



- **Lack of medical supplies (e.g. syringes, bandages) have affected many providers' duties in the past three months.** Over half (57%) of providers report their duties were affected by medical supply stock-outs. Most providers do not consider the availability of medical equipment (71%), administrative materials (79%), or equipment functionality (85%) an issue in the past three months.

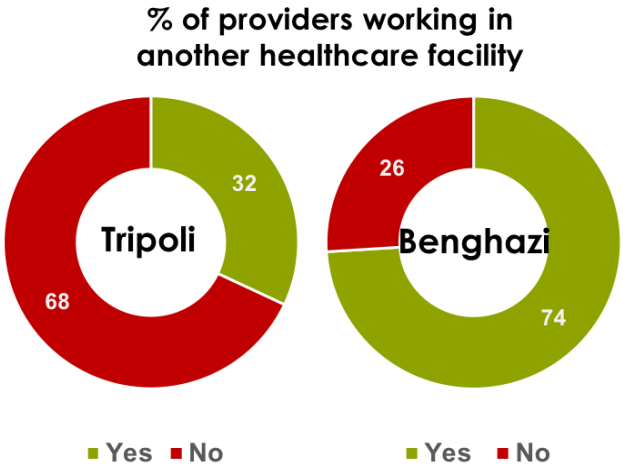
Provider Compensation

- **Nearly three-quarters of providers report not receiving any training in the past three years.** 72% of providers across both Tripoli and Benghazi say they have not had any form of continuous medical or health training during this period. However, 60% of providers say they are interested in performing new tasks or skills to improve the services offered at their clinic. Among this group, 85% say they would need additional training to perform these new tasks.

- **Most providers have not been paid on time in the past three months and half have not had their salary paid in full within the same time period.** 88% of providers report that their salary has not been paid on time in the past three months, and 52% say their salary has not been paid in full during the same period. Equal numbers of providers in Benghazi and Tripoli have not received their salary on time, but providers in Tripoli are slightly more likely to report that their salary has not been paid in full (57% in Tripoli, compared to 48% in Benghazi). The most common perceived reason for payment issues is a lack of cash flow at the national level/Central Bank (85%).

- **As a result, many providers report having a second job in another health facility.** Four in ten work at a private health facility in addition to their current position, and another 14% work at another public clinic. Having a second job is much more common in Benghazi than in Tripoli.

Figure 8. Percent of providers, by city, working in another healthcare facility.



- **There are virtually no awards or recognition for good performance.** Less than 5% of providers report there are any rewards at their facility for performing at or above expectations (3%), consistent performance during their entire shift (3%), consistent attendance (2%), or consistent timeliness (1%).

- **A majority of providers are willing to work at a different facility in the same city, and nearly half are willing to move cities, for more money.** 53% say they would move to another local facility for a higher salary or stipend, while 11% would move clinics for free additional training and 3% for recognition. Slightly less providers (47%) are willing to relocate to another city entirely for a higher salary or stipend. Just 1% of providers would move to another city for free training or recognition.

- **The willingness to relocate cities is much greater among providers in Benghazi as compared to Tripoli.**