Acknowledgements

The EUAA acknowledges International SOS as the drafter of this report.

The report has been reviewed by International SOS and EUAA.
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Disclaimer

This report was written according to the EUAA COI Report Methodology (2023). The report is based on publicly available sources of information, as well as oral anonymised sources who are based in Ghana. All sources used are referenced.

The information contained in this report has been researched, evaluated and analysed with utmost care. However, this document does not claim to be exhaustive. If a particular event, person or organisation is not mentioned in the report, this does not mean that the event has not taken place or that the person or organisation does not exist.

Furthermore, this report is not conclusive as to the determination or merit of any particular application for international protection. Terminology used should not be regarded as indicative of a particular legal position.

‘Refugee’, ‘risk’ and similar terminology are used as generic terminology and not in the legal sense as applied in the EU Asylum Acquis, the 1951 Refugee Convention and the 1967 Protocol relating to the Status of Refugees.

Neither the EUAA, nor any person acting on its behalf, may be held responsible for the use which may be made of the information contained in this report.

On 19 January 2022 the European Asylum Support Office (EASO) became the European Union Agency for Asylum (EUAA). All references to EASO, EASO products and bodies should be understood as references to the EUAA.

The drafting of this report was finalised on 31 October 2023. Any event taking place after this date is not included in this report. More information on the reference period for this report can be found in the methodology section of the Introduction.
## Glossary and abbreviations

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHPS</td>
<td>Community-Based Health Planning Services</td>
</tr>
<tr>
<td>FDA</td>
<td>Food and Drugs Authority</td>
</tr>
<tr>
<td>GHS</td>
<td>Ghanaian Cedi</td>
</tr>
<tr>
<td>Hb</td>
<td>Haemoglobin</td>
</tr>
<tr>
<td>IDF</td>
<td>International Diabetes Federation</td>
</tr>
<tr>
<td>NHIS</td>
<td>National Health Insurance Scheme</td>
</tr>
<tr>
<td>NCD</td>
<td>Non-Communicable Disease</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>OCT</td>
<td>Optical Coherence Tomography</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary Healthcare</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
Introduction

Methodology

The purpose of the report is to provide information on access to diabetes mellitus treatment in Ghana. This information is relevant to the application of international protection status determination (refugee status and subsidiary protection) and migration legislation in EU+ countries.

Terms of reference

The terms of reference for this Medical Country of Origin Information Report were developed by EUAA.

The terms of reference for this Medical Country of Origin Information Report can be found in Annex 2: Terms of Reference (ToR). The initial drafting period was finalised on 8 September 2023, peer review occurred between 9 - 29 September 2023, and additional information was added to the report as a result of the quality review process during the review implementation up until 31 October. The report was internally reviewed subsequently.

Collecting information

EUAA contracted International SOS (Intl.SOS) to manage the report delivery including data collection. Intl.SOS recruited and managed a local consultant to write the report and a public health expert to edit the report. These were selected from Intl.SOS’ existing pool of consultants. The consultant was selected based on their experience in leading comparable projects and their experience of working on public health issues in Ghana.

This report is based on publicly available information in electronic and paper-based sources gathered through desk-based research. This report also contains information from multiple oral sources with ground-level knowledge of the healthcare situation in Ghana who were interviewed specifically for this report. For security reasons, all oral sources are anonymised.

Quality control

This report was written by Intl.SOS in line with the European Union Agency for Asylum (EUAA) COI Report Methodology (2023),1 the EUAA Country of Origin Information (COI) Reports Writing and Referencing Guide (2023)2 and the EUAA Writing Guide (2022).3 Quality control of the report was carried out both on content and form. Form and content were reviewed by Intl.SOS and EUAA.

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1 EUAA, Country of Origin Information (COI) Report Methodology, February 2023, url
3 EUAA, The EUAA Writing Guide, April 2022, url
The accuracy of information included in the report was reviewed, to the extent possible, based on the quality of the sources and citations provided by the consultants. All the comments from reviewers were reviewed and were implemented to the extent possible, under time constraints.

**Sources**

In accordance with EUAA COI methodology, a range of different published sources have been consulted on relevant topics for this report. These include governmental publications, academic publications, reports by non-governmental organisations and international organisations. All sources that are used in this report are outlined in the Bibliography section.

Key informant interviews were carried out in July 2023. Interviews were conducted mainly with officers who work within organisations of Ghana’s healthcare system. A complete anonymised list of interviewees can be found in the bibliography.
1. Diabetes mellitus

Diabetology is a medical field that specialises in the study, diagnosis and treatment of diabetes and its related complications. This report looks at the situation of care for diabetes mellitus in Ghana.

1.1. Prevalence of diabetes mellitus

According to a meta-analysis of 17 studies, which were published between 2002 and 2017, the overall prevalence of diabetes mellitus among adults is 6.46 %.

More recent prevalence studies are however lacking. Among adults aged 50 years and above, the weighted prevalence of diabetes in Ghana was 3.95 % according to 2016 data. The International Diabetes Federation (IDF) reports that the prevalence of diabetes in adults in Ghana is 2 %.

The World Health Organization (WHO) states that approximately 7.5 % of adults in Ghana have type 2 diabetes, and there are about 2.4 million people living with diabetes in the country.

According to the World Bank, the diabetes prevalence among adults aged 20-79 years in Ghana was 2.1 % in 2022. The statistics platform Statista reports that between 2019 and 2022, more than 4.16 million people in Ghana had type 2 diabetes.

Despite the stated prevalence of diabetes in Ghana, many people are likely to not be diagnosed and there are concerns that the real numbers may be higher.

1.2. Overview of the health sector

Ghana has a pluralistic health sector in terms of ownership (public and private) and in terms of healthcare models (orthodox, traditional and alternative medicine). Healthcare services are provided by the public sector, as well as by private sector service providers made up of for-profit providers and non-profit faith-based health facilities. The health system is organised in three levels: the primary level, with a focus on primary healthcare (PHC) services, starts with the community-based health planning services (CHPS) compound, followed by the sub-district...
health centre/clinic and lastly the district hospital. The secondary and tertiary levels have regional and teaching hospitals respectively.13

Public and private facilities, at all levels of the health system, can provide care within limits set by the Standard Treatment Guidelines 2017.14 The primary level of care has the capacity to identify and make differential diagnoses of some of the diabetes conditions. This capacity is mostly at the district hospital level where medical staff can make more definitive diagnoses, commence basic care and also refer the client to the appropriate secondary or tertiary facility for definitive case management.15

Though there is no institute specialising in the treatment of diabetes mellitus, the teaching hospitals have the most diabetic care expertise. There are no private specialist diabetic treatment centres, but there are private health facilities that provide specialist diabetes consultations as part of their service package. Most of these facilities are located in the regional capitals, as physician specialists/diabetologists/endocrinologists working in the respective regional or teaching hospitals can provide part-time services in the private sector. Some diabetic care is available throughout the country.16

The main sources of health financing for the majority of people living with diabetes is the National Health Insurance Scheme (NHIS). However, this usually only covers the cost of inpatient (bed and feeding) and outpatient care (consultation), as well as in both settings, some laboratory investigations and categories of medicines. The NHIS does not cover the cost of diabetic supplies, such as glucometers, glucose strips, lancets, insulin syringes and insulin needles, which must be purchased out of pocket.17

2. Access to treatment

As described in the previous section, treatment is available at all levels of the health system, within the prescribed limits of the Standard of Treatment Guidelines 2017. All patients can access care at the nearest point of service to them at any level of the health system. Based on the severity of the condition and the capacity of the point of service to manage the condition, care will be continued, or the patient will be referred to the next higher level of care for further appropriate case management. Patients can however walk into any emergency room in any secondary or tertiary facility and be admitted for treatment.18 Waiting times for outpatient services access are variable and depend on the clinic and the patient load for the day. Most

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13 Ghana, MOH, Health Sector Medium Term Development Plan 2022-2025, December 2021, url, p. 11
14 Ghana, MOH, GNDP, Standard Treatment Guidelines, 2017, url, p. 287
15 CDKII01, consultant diabetologist, interview, July 2023, Accra.
16 CDKII01, consultant diabetologist, interview, July 2023, Accra.
17 CDKII01, consultant diabetologist, interview, July 2023, Accra.
18 CDKII01, consultant diabetologist, interview, July 2023, Accra.
clinics do not offer timed appointments but rather schedule the patients to come on a particular day.\textsuperscript{19}

Some facilities have dedicated diabetes clinics, some have integrated diabetes and hypertension clinics, and others do not have dedicated services. The Non-Communicable Disease (NCD) programme of the Ghana Health Service is currently working on streamlining diabetes care.\textsuperscript{20}

Treatment is geographically accessible in all regions. However, urban towns have better access to specialist services than rural areas, primarily because of the presence of secondary and/or tertiary facilities. In general, the most significant barriers to treatment access include unavailability of the treatment needed, limited by the level of care at which it is sought and the staff expertise available, and inability to pay for the care available. Patients who have registered with the NHIS or private medical insurance schemes will have their cost of care (either inpatient or outpatient) covered, as determined by their insurance package, and those without any form of insurance will have to pay out of pocket for these services. Private health insurance schemes cover more types of services and are able to pay higher tariffs for services covered, than what the NHIS offers.\textsuperscript{21}

Uninsured patients pay out of pocket for all services received at outpatient as well as inpatient points of care. These include the cost of consultation, diagnostic services, medicines and inpatient accommodation fees, as necessary. If insured, on presentation of one’s insurance card, whether NHIS or private, no direct payment is made by the patient, as the insurance company re-imburses the service provider at a later date on submission of claims.\textsuperscript{22}

Except for NHIS, there is no government financial support for patients with diabetes. The NHIS coverage for diabetes care is considered inadequate as it does not fully cover the cost of specialised diagnostic services, personal care devices and medicines.\textsuperscript{23}

The access to treatment as described is the same for citizens returning to the country after spending some time abroad. There is no discrimination to access diabetes treatment and care.\textsuperscript{24}

3. Insurance and national programmes

The public NHIS and private health schemes cover both inpatient and outpatient cost of care to different degrees, with the private schemes generally providing more coverage than the

\textsuperscript{19} CDKII01, consultant diabetologist, interview, July 2023, Accra.
\textsuperscript{20} CDKII01, consultant diabetologist, interview, July 2023, Accra.
\textsuperscript{21} CDKII01, consultant diabetologist, interview, July 2023, Accra.
\textsuperscript{22} CDKII01, consultant diabetologist, interview, July 2023, Accra.
\textsuperscript{23} CDKII01, consultant diabetologist, interview, July 2023, Accra.
\textsuperscript{24} CDKII01, consultant diabetologist, interview, July 2023, Accra.
NHIS.25 The NHIS covers consultation fees for all general and specialist clinic attendances, as well as hospital admission (bed and feeding). All persons living in Ghana can register for this insurance.26

4. Non-governmental organisations (NGOs)

There are civil society organisations, such as NCD Alliance, Diabetes Youth Care and the Coalition of NGOs in health. These organisations primarily engage in public education, behaviour change programmes and advocacy in pre-selected communities. All residents in the catchment areas are eligible by virtue of their being resident there. Services provided are usually limited to screening, health promotion and formation of care support groups. These services are provided for free.27

5. Cost of treatment

The cost of treatment in the public sector is regulated by NHIS. The NHIS tariffs are expected to be the official fees and charges in public facilities. This is often not adhered to because the insurance tariffs are lower than the market prices and do not cover the current cost of the services. Facilities, mainly the teaching hospitals, will go on to secure parliamentary approval for higher rates for fees and charges that the NHIS tariffs are unable to fully cover. These additional fees and charges are paid out of pocket by patients. Other public facilities will have instances where staff request unofficial fees and charges for services rendered.28

The cost of treatment in the private sector is not regulated and different service providers set different fees and charges that enable them to, at least, fully recover their costs. These fees and charges may be revised at any time and the revisions are primarily influenced by foreign exchange rates and market forces.29

The cost of treatment is generally higher in private than in public facilities, and also it increases from primary to tertiary level of care.30

25 CDKII01, consultant diabetologist, interview, July 2023, Accra.
26 CDKII01, consultant diabetologist, interview, July 2023, Accra.
27 CDKII01, consultant diabetologist, interview, July 2023, Accra.
28 CDKII01, consultant diabetologist, interview, July 2023, Accra.
29 CDKII03, administrator at a private hospital, interview, July 2023, Accra.
30 CDKII01, consultant diabetologist, interview, July 2023, Accra.
In Table 1 and Table 2, the public outpatient and inpatient treatment prices are based on the NHIS prices, and the private outpatient and inpatient treatment prices, as well as information on insurance coverage and reimbursement are based on information provided by interviewee CDKII02.

Concerning the coverage and reimbursement of the treatment prices in the tables 1 and 2 below, the following principles apply to all listed treatments:

1/ Public and some private sector facility treatment prices are covered by NHIS and sometimes private insurance.

2/ If insured, on presentation of one’s insurance card, whether NHIS or private, no payment is made by the patient, as the insurance company re-imburses the facility at a later date on submission of claims.

3/ In public facilities, any price difference between the listed NHIS tariffs and the price asked by the facility is borne by the patient (some facilities obtain parliamentary approval to increase their prices). In private facilities where NHIS coverage is accepted, the price difference between the NHIS tariffs and the private price is borne by the patient.

4/ Uninsured patients pay out of pocket for all services at public and private facilities.

Table 1: Price for treatment for adults in public tertiary and private health facilities

<table>
<thead>
<tr>
<th>Specialist</th>
<th>Public outpatient treatment price in GHS</th>
<th>Public inpatient treatment price in GHS</th>
<th>Private outpatient treatment price in GHS</th>
<th>Private inpatient treatment price in GHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal specialist</td>
<td>200</td>
<td>550 - 650</td>
<td>1033 - 1239</td>
<td>1239 - 1321</td>
</tr>
<tr>
<td>(internist)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endocrinologist</td>
<td>147</td>
<td>375 - 500</td>
<td>375 - 500</td>
<td>1577</td>
</tr>
<tr>
<td>Ophthalmologist</td>
<td>147</td>
<td>375 - 500</td>
<td>375 - 500</td>
<td>1250 - 1450</td>
</tr>
<tr>
<td>Neurologist</td>
<td>147</td>
<td>375 - 500</td>
<td>375 - 500</td>
<td>1150 - 1350</td>
</tr>
<tr>
<td>General practitioner</td>
<td>78</td>
<td>375 - 500</td>
<td>375 - 500</td>
<td>1050 - 1250</td>
</tr>
</tbody>
</table>

31 Ghana, NHIS, Tariffs for Tertiary Hospitals, February 2023,
32 CDKII02, specialist pharmacist, interview, July 2023, Accra.
<table>
<thead>
<tr>
<th>Specialist</th>
<th>Public outpatient treatment price in GHS</th>
<th>Public inpatient treatment price in GHS</th>
<th>Private outpatient treatment price in GHS</th>
<th>Private inpatient treatment price in GHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vascular surgeon (e.g. for diabetic foot)</td>
<td>147</td>
<td>375 - 500</td>
<td>375 - 500</td>
<td>3 500 - 4 500</td>
</tr>
</tbody>
</table>

Table 2.2: Price for diagnostic investigations in public tertiary and private health facilities

<table>
<thead>
<tr>
<th>Test Description</th>
<th>Public treatment price in GHS</th>
<th>Private treatment price in GHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood glucose (incl.: HbA1C/glyc. Hb)</td>
<td>78</td>
<td>155 - 225</td>
</tr>
<tr>
<td>Renal/kidney function (creatinine, ureum, proteinuria, sodium, potassium levels)</td>
<td>62</td>
<td>120 – 155</td>
</tr>
<tr>
<td>Laboratory research of thyroid function (TSH, T4, T3)</td>
<td>202</td>
<td>258 – 325</td>
</tr>
<tr>
<td>Blood glucose meter for self-use by patient</td>
<td>450-500</td>
<td>800 – 850</td>
</tr>
<tr>
<td>Blood glucose self-test strips for use by patient</td>
<td>260</td>
<td>300 - 350</td>
</tr>
<tr>
<td>(50 strips per pack)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical admittance in internal or endocrinology department (daily rates)</td>
<td>147</td>
<td>1 230 - 1 350</td>
</tr>
<tr>
<td>Laser treatment of diabetic retinopathy</td>
<td>Argon laser photocoagulation – 1 200</td>
<td>1 350 - 1 500</td>
</tr>
<tr>
<td>Macular and laser photocoagulation – 1 000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostic imaging: Optical coherence tomography (OCT)</td>
<td>200</td>
<td>450 - 650</td>
</tr>
<tr>
<td>Ophthalmology: Intravitreal injections with medication</td>
<td>600</td>
<td>850 - 1 200</td>
</tr>
</tbody>
</table>
6. Cost of medication

The cost of medication in the public sector is regulated by the NHIS medicines’ list. The NHIS medicines’ list is expected to include official charges for medicines in public facilities. This is often not adhered to because the NHIS’s medicines’ prices are lower than the market prices. Facilities, mainly the teaching hospitals, will go on to secure parliamentary approval for higher fees and charges to ensure they are able to recover the cost of medicines, which the NHIS may not fully cover. These additional fees and charges are paid out-of-pocket by patients.

The cost of medicines in the private sector is not regulated and different service providers set different fees and charges that enable them to, at least, fully recover their costs. These fees and charges may be revised at any time and the revisions are primarily influenced by foreign exchange rates.

The cost of medication is generally higher in private as compared to public facilities and also increases from primary to tertiary level of care. Most medicines are available in the whole country. The private sector pharmacies maintain a more complete stock of medicines than public facilities and medicines are more readily available in urban than in rural communities.

As far as possible, medicines found in the country are registered by the Food and Drugs Authority (FDA) for use. The implication of this is that the quality of the medicines can be assured, to a large extent. For a product to be registered it means that it has gone through and passed the rigorous testing and product source verification processes carried out by the FDA of Ghana. However non-registered as well as fake medicines are also found in the country.

Some of the medicines are on the Essential Medicines List and the National Health Insurance Medicines List. Their inclusion on the list encourages pharmacies and health facilities to stock them, reducing situations when stocks run out. Public facilities prices as available in the NHIS medicines’ list. No brand names are covered under the medicines’ list.

In situations where medicines are not available in the country, citizens may make arrangements for friends and family living abroad to purchase and send to them these medicines, or they may seek the support of pharmacies to order the medicines. These scarce medicines may or may not be registered by the FDA. These medications are often prescription-only medications and often need to be accompanied by the prescription.

33 Ghana, NHIS, Medicine List, February 2023, url.
34 CDKII01, consultant diabetologist, interview, July 2023, Accra.
35 CDKII03, administrator at a private hospital, interview, July 2023, Accra.
36 CDKII01, consultant diabetologist, interview, July 2023, Accra.
37 CDKII01, consultant diabetologist, interview, July 2023, Accra.
38 CDKII02, specialist pharmacist, interview, July 2023, Accra.
39 CDKII02, specialist pharmacist, interview, July 2023, Accra.
40 CDKII02, specialist pharmacist, interview, July 2023, Accra.
In Table 3, “Pharmacy” refers to the private sector and “Hospital” refers to the public sector. Prices as well as insurance coverage and reimbursement information is provided by interviewee CDKI02. Concerning the coverage and reimbursement of the medication prices in the table below, the following principles apply:

1/ Both public and private sector prices can be covered by NHIS or/and private insurance.

2/ If insured, on presentation of one’s insurance card, whether NHIS or private, no payment is made by the patient, as the insurance company re-imburses the facility at a later date on submission of claims.

3/ In private facilities, where NHIS coverage is accepted, the price difference between the NHIS tariffs and the private price is borne by the patient.

4/ Uninsured patients pay out-of-pocket for all medications at public and private facilities.

**Table 3: Medicines prices in both public and private sector**

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Brand name</th>
<th>Strength of unit</th>
<th>Form</th>
<th>Number of units in the container</th>
<th>Price per box in GHS</th>
<th>Place (pharmacy, hospital, …)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulin, premixed: aspart (rapid acting) and aspart protamine (intermediate acting) like ®Novomix</td>
<td>Novomix™</td>
<td>100 iu/ml</td>
<td>injection pen</td>
<td>5</td>
<td>218.7</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Insulin, premixed: combination of regular (short acting) and insulin isophane (intermediate acting) like ®Mixtard</td>
<td>Mixtard™</td>
<td>100 iu/ml</td>
<td>vial</td>
<td>1</td>
<td>105</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Insulin, premixed: NPH 70/30 combination of rapid and intermediate acting insulin</td>
<td>Mixtard Flexpen™</td>
<td>100 iu/ml</td>
<td>injection pen</td>
<td>5</td>
<td>480</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Insulin, premixed: NPH 70/30</td>
<td>Insulin, premixed: NPH 70/30I</td>
<td>100 iu/ml</td>
<td>vial</td>
<td>1</td>
<td>35.32</td>
<td>Hospital</td>
</tr>
<tr>
<td>Insulin: intermediate acting [12-24hr]; insulin NPH/isophane like ®Insulatard</td>
<td>Insulatard™</td>
<td>100 iu/ml</td>
<td>injection pen</td>
<td>5</td>
<td>305</td>
<td>Pharmacy</td>
</tr>
</tbody>
</table>

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41 CDKI02, specialist pharmacist, interview, July 2023, Accra
<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Brand name</th>
<th>Strength of unit</th>
<th>Form</th>
<th>Number of units in the container</th>
<th>Price per box in GHS</th>
<th>Place (pharmacy, hospital, ...)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulin: long acting [24hr]: insulin glargine like &quot;Lantus&quot;</td>
<td>Lantus Solitaire™</td>
<td>100 iu/ml</td>
<td>injection pen</td>
<td>5</td>
<td>1 150</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Dulaglutide</td>
<td>Trulicity™</td>
<td>1.5 mg</td>
<td>injection</td>
<td>4</td>
<td>3 186</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Liraglutide</td>
<td>Victoza™</td>
<td>6 mg/ml</td>
<td>injection pen</td>
<td>1</td>
<td>1 481</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Semaglutide</td>
<td>Ozempic™</td>
<td>1 mg</td>
<td>injection</td>
<td>4</td>
<td>5 332.5</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Dapagliflozin</td>
<td>Forxiga™</td>
<td>10 mg</td>
<td>tablet</td>
<td>28</td>
<td>840</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Glibenclamide</td>
<td>Daonil™</td>
<td>5 mg</td>
<td>tablet</td>
<td>100</td>
<td>250</td>
<td>Pharmacy</td>
</tr>
<tr>
<td></td>
<td>Glibenclamide</td>
<td>5 mg</td>
<td>tablet</td>
<td>100</td>
<td>13</td>
<td>Hospital</td>
</tr>
<tr>
<td>Glipizide</td>
<td>Diamicron™</td>
<td>60 mg</td>
<td>tablet</td>
<td>30</td>
<td>270</td>
<td>Pharmacy</td>
</tr>
<tr>
<td></td>
<td>Glipizide</td>
<td>60 mg</td>
<td>tablet</td>
<td>28</td>
<td>70</td>
<td>Hospital</td>
</tr>
<tr>
<td>Glimepiride</td>
<td>Amaryl™</td>
<td>2 mg</td>
<td>tablet</td>
<td>30</td>
<td>201</td>
<td>Pharmacy</td>
</tr>
<tr>
<td></td>
<td>Blimepiride</td>
<td>2 mg</td>
<td>tablet</td>
<td>30</td>
<td>144</td>
<td>Hospital</td>
</tr>
<tr>
<td>Glucagon</td>
<td>Glucagon</td>
<td>1 mg</td>
<td>ampoule</td>
<td>1</td>
<td>338</td>
<td>Pharmacy</td>
</tr>
<tr>
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<td>Tradjenta™</td>
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<td>tablet</td>
<td>30</td>
<td>591</td>
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<td>O-formin™</td>
<td>500 mg</td>
<td>tablet</td>
<td>100</td>
<td>1 100</td>
<td>Pharmacy</td>
</tr>
<tr>
<td></td>
<td>Metformin</td>
<td>500 mg</td>
<td>tablet</td>
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<td>700</td>
<td>Hospital</td>
</tr>
<tr>
<td>Pioglitazone</td>
<td>LG Glizone™</td>
<td>15 mg</td>
<td>tablet</td>
<td>30</td>
<td>9</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Generic Name</td>
<td>Brand name</td>
<td>Strength of unit</td>
<td>Form</td>
<td>Number of units in the container</td>
<td>Price per box in GHS</td>
<td>Place (pharmacy, hospital, ...)</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------</td>
<td>------------------</td>
<td>------</td>
<td>----------------------------------</td>
<td>----------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Pioglitazone</td>
<td>Pioglitazone</td>
<td>15 mg</td>
<td>mg</td>
<td>100</td>
<td>15</td>
<td>Hospital</td>
</tr>
<tr>
<td>Saxagliptin + metformin</td>
<td>Kombiglyze™</td>
<td>5 mg/1 000 mg</td>
<td>tablet</td>
<td>30</td>
<td>726</td>
<td>Pharmacy</td>
</tr>
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<td>500 mg</td>
<td>tablet</td>
<td>10</td>
<td>16</td>
<td>Hospital</td>
</tr>
</tbody>
</table>
Annex 1: Bibliography

Oral sources, including anonymous sources

CDKII01, a consultant diabetologist, interview, Accra, July 2023. The person wishes to remain anonymous.

CDKII02, a specialist pharmacist, interview, Accra, July 2023. The person wishes to remain anonymous.

CDKII03, an administrator at a private hospital, interview, Accra, July 2023. The person wishes to remain anonymous.

Public sources


Ghana, NHIS (National Health Insurance Authority), Tariffs for Tertiary Hospitals, February 2023, accessed 22 August 2023, not available online
Ghana, NHIS (National Health Insurance Scheme), Medicine List, February 2023, [https://nhis.gov.gh/medlist](https://nhis.gov.gh/medlist), accessed 22 August 2023


Annex 2: Terms of Reference (ToR)

Diabetes Mellitus

Note for drafters: These are guidelines on the information to be included. If one aspect is not relevant, e.g., there is no national institute to treat this disease or no international donor programme, there is no need to mention it. Keep the focus on treating medicine – preventive care can be mentioned but is of less interest to the target group.

General information

- Briefly describe prevalence and incidence of diabetes mellitus (epidemiologic data).
- How is the health care organized for this disease?
- How is the disease treated – at specific centres, in primary health care centres, secondary care / hospitals, tertiary care etc.?
- Which kinds of facilities can treat the disease [public, private not for profit (e.g., hospitals run by the church), private for-profit sector]? Include links to facilities’ websites if possible.
- How are the resources organized in general to treat patients with this disease? Are there sufficient resources available to treat all patients?
- Is there a particular type of diabetes for which no (or only partial) treatment exists in the country?
- Is there a (national) institute specialised in treating this disease?
- Are there any national or international plans or (donor) programmes for diabetes; if yes, could you elaborate on such programme(s) and what it entails?

Access to treatment

- Are there specific treatment programmes for diabetes mellitus? If so, what are the eligibility criteria to gain access to it and what they contain?
- Are there specific government (e.g., insurance or tax) covered programmes for this disease? If so, what are the eligibility criteria to gain access to it?
- Are there any factors limiting the access to healthcare for patients? If so, are they economic, cultural, geographical, etc.? Are there any policies to improve access to healthcare and/or to reduce the cost of treatments and/or medication? What is the number of people having access to treatment? Keep focus on e.g., waiting times rather than the exact number of specialists in the field.
- If different from information provided in the general section; is the treatment geographically accessible in all regions?
• What is the ‘typical route’ for a patient with this disease (after being diagnosed with the disease)? In other words: for any necessary treatment, where can the patient find help and/or specific information? Where can s/he receive follow-up treatment? Are there waiting times for treatments (e.g., foot surgery, etc)?
• What must the patient pay and when?
• Is it the same scenario for a citizen returning to the country after having spent a number of years abroad?
• What financial support can a patient expect from the government, social security or a public or private institution? Is treatment covered by social protection or an additional / communal health insurance? If not, how can the patient gain access to a treatment?
• Any occurrences of healthcare discrimination for people with diabetes?

Insurance and national programmes

Include if relevant, otherwise delete section.

• National coverage (state insurance).
• Programmes funded by international donor programmes.
• Include any insurance information that is specific for patients with this disease.

Cost of treatment

Guidance / methodology on how to complete the tables related to treatments:

• Do not delete any treatments from the tables. Instead state that they are not available or information could not be found if that is the case.
• In the table, indicate the price for inpatient and outpatient treatment in public and private facilities and if the treatments are covered by any insurance or by the state.
• For inpatient, indicate what is included in the cost (bed / daily rate for admittance, investigations, consultations...). For outpatient treatment, indicate follow up or consultation cost.
• Is there a difference in respect to prices between the private and public facilities?
• Are there any geographical disparities?
• Are the official prices adhered to in practice?
• Include links to online resources used, if applicable (e.g., hospital websites).

Note: a standardised list of treatments was also included in the original ToR, as can be viewed in the report.
Cost of medication

Guidance / methodology on how to complete the tables related to medications:

- Do not delete any medicines from the tables. Instead, state that they are not available or information could not be found if that is the case.
- Are the available medicines in general accessible in the whole country or are there limitations?
- Are the medicines registered in the country? If yes, what are the implications of them being registered?
- Indicate in the tables: generic name, brand name, dosage, form, pills per package, official prices, source, insurance coverage.
- Are (some of the) medicines mentioned on any drug lists like national lists, insurance lists, essential drug lists, hospital lists, pharmacy lists etc.? If so, what does such a list mean specifically in relation to coverage?
- Are there other kinds of coverage, e.g., from national donor programmes or other actors?
- Include links to online resources used, if applicable (e.g., online pharmacies).

Note: a standardised list of medication was also included in the original ToR, as can be viewed in the report.

NGOs

Include if relevant, otherwise delete section.

- Are any NGOs or international organisations active for diabetes patients? What are the conditions to obtain help from these organisations? What help or support can they offer?
- Which services are free of charge and which ones are at a cost? Is access provided to all patients or access is restricted for some (e.g., in case of faith-based institutions or in case of NGOs providing care only to children for instance).