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# **WHO COVID-19 RESPONSE PROGRAM**

## **REPORT DEVELOPMENT ON MAPPING OF HEALTH DATA SYSTEMS IN GEORGIA**

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Report development on mapping of health data systems in Georgia.

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# Contents

<b>S. No</b>	<b>Topics</b>	<b>Page Number</b>
1	Executive Summary	1
2	Abbreviations	3
3	Background and Objectives	4
4	Settings	5
5	Methods	11
6	Results	
	a) Objective 1	12
	b) Objective 2	16
	c) Objective 3	25
	d) Objective 4	25
7	Conclusion	28
5	References	29
6	Tables and figures	30

## **1. EXECUTIVE SUMMARY**

### **Why we did this desk review?**

High-quality and timely availability of health information is an essential component of a responsive national health system and is required for quick and evidence-based decision-making. Recognizing the challenges related to health information collection and processing, Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health, and Social Affairs (MoIDPLHSA) of Georgia sought the support of the WHO for health information system (HIS) strengthening. The WHO/CO Georgia is implementing activities under the USAID-funded multidimensional program for strengthening digital HIS. In the scope of this program, WHO is aiming to support the relevant institutions (MoIDPLHSA, National IT Agency). On the request of WHO Regional Office for Europe, ICMR-National Institute of Epidemiology (ICMR-NIE), Chennai, India, conducted a situational analysis with the aim to understand the primary healthcare data flow in Georgia, mapping of data systems and reporting forms with a view to reducing duplication in data collection and provide recommendations for digitalization, data integration and interoperability based on the findings.

### **What we did?**

This evaluation examined the data fields (variables) used for reporting in the primary health care (PHC) system of Georgia. A data collection instrument was used to gather information about the forms used in the HIS for PHC. The data fields (n=5705) from the forms/modules (n=191) were organized in an MS Excel file. Each row was a variable, and each column was a description of the variable. WHO CO Georgia compiled this MS Excel file with the help of MoIDPLHSA and shared it with ICMR-NIE. The data flow from each person involved in PHC data collection to the higher levels were mapped and the forms collected under various data management systems also mapped to understand the PHC data flow. The forms were categorized by the services they were used for. The duplications were identified and documented. The recommendations based on the analysis have been provided. Two qualitative questions related to the problems faced during collecting electronic data and suggestions to improve the same were also analyzed and summarized in this report.

### **What did we find out?**

The PHC data in Georgia is collected by PHC providers and reported to state agencies through four data management systems and 188 forms. The main data management systems collecting data at PHC are the Unified Information System of Management of Public Health Care Medical Institute of National Centre for Disease Control and Public Health under state MoIDPLHSA and the Quality Management System of Family Medicine Office Service Standards. The other two data management systems: The electronic health record system of the National Centre for Disease Control and Public Health and the patient management system are used for only one form and three forms, respectively. Some variables are collected multiple times in paper and electronic forms for some PHC services. Some of the collected variables are not used regularly for analysis or decision making and some vertical health programs are not included. We have identified such variables in some forms, mapped them by specific services and suggested ways to reduce duplication and digitalize them. We found that there is a need to reduce duplication, digitalize data, and make the data systems more interoperable. The qualitative data showed that slow internet / web portal speed was the main problem reported.

## What do we recommend?

The PHC system of Georgia uses many paper forms and electronic portals to collect data, but the portals have low speed. The results show the complexity of the PHC data flow and the need to reduce duplication among the collected forms. There is a potential chance of digitalising paper formats to existing electronic data management systems and suggestions have been provided for data integration and data interoperability.

**First**, all beneficiaries may have an ID and register during their first primary health care (empanelment of beneficiaries) visit/service. The registration should sync with the National Public Registry Agency. Any changes may be updated and shared using a common portal. **Second**, the local hospital level may link the information of the registering institute, the empanelled population, and the institute's details to the beneficiary ID. **Third**, there may be separate portals for doctors, nurses, human resource managers, and other staff filling the forms. The nurse should enter the beneficiary ID under an outpatient department services portal during an outpatient visit. This will generate the visit details and sync them to the data system. This will allow real-time updates on reports. **Fourth**, the doctor should have a separate portal to record the services provided. The doctor should record the examination, laboratory tests, radiology findings, diagnosis (using ICD 10), and prescription. Artificial Intelligence can help with the diagnosis. This data should match with the nurse's data system. **Fifth**, a common portal for vaccination will help the nurse with dose calculation, visit registration, vaccination update, individual tracking, cold-chain system tracking, and inventory management. **Sixth**, a separate portal to measure radiation exposure during procedures can help to track the radiation dose and take safety measures. **Seventh**, the patient can be identified and mapped digitally by the target group, which can help to provide services to the specific groups. **Eighth**, the birth and death data should be recorded at the polyclinic level using a common portal and shared with the National Statistics Office of Georgia. The birth registration should give a birth certificate number for beneficiary registration. This will allow population analysis and indicator generation. **Ninth**, the financial flow can be recorded at the PHC system level by linking the beneficiary ID with insurance details and service costs. <sup>3</sup> This will reduce expenditures, plan strategies and audits. **Tenth**, the vertical programs (TB/HIV/Maternal Health) should be compatible at the PHC system level for monitoring and tracking health activities. **Eleventh**, human resource management can be done by integrating data from each PHC institute. This will monitor health work and performance and unmet needs. **Twelfth**, State portals user management is relying on shared accounts for multiple users, jeopardizing data security and privacy. A strong electronic health ecosystem with good connectivity and interoperability is recommended. **Thirteenth**, interoperability needs patient confidentiality and data ownership. eHealth applications and databases should follow EHR standards and use standardized vocabulary and data structures with a cyber security law in place. **Finally**, proposing a new lean health data structure to support the optimization of data collection requires further brainstorming with all the stakeholders of the Georgian healthcare system.

## Keywords

Primary health care system; Health information system; Data flow and mapping; digitalization; Electronic health records; Interoperability; Georgia

## 2. ABBREVIATIONS

1. **MoIDPLHSA** - The Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs
2. **WHO**- World Health Organization
3. **MoF** - Ministry of Finance
4. **MoESD** -The Ministry of Economy and Sustainable Development
5. **MoES** – The Ministry of Education and Science
6. **MoEPA** -The Ministry of Environment Protection and Agriculture of Georgia
7. **SSA** -The Social Services Agency
8. **SRAMA** -State Regulation Agency for Medical Activities
9. **NCDC** - National Centre for Disease Control and Public Health
10. **SARAS** -Service for Accounting, Reporting and Auditing Supervision
11. **RoGG** -Resolution of the Government of Georgia No. 317
12. **NSSG** - The National Statistical Service of Georgia
13. **NPRA** - The National Public Registry Agency of Ministry of Justice
14. **MoJ**- Ministry of Justice
15. **PHC**- Primary Health Care
16. **HIS**- Health Information System
17. **eHealth**- Electronic Health
18. **EHR**- Electronic Health Records
19. **EMR** – Electronic Medical Records
20. **HIV/AIDS**- Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome
21. **WHO/CO**- WHO Country Office
22. **USAID**- United States Agency for International Development
23. **IT**- Information Technology
24. **ITA** – Information Technology Agency
25. **GDP**- Gross Domestic Product
26. **TB**-Tuberculosis
27. **ID number/form**- Identification number/form
28. **FMOSS**- Family Medicine Office Service Standards
29. **NCD**- Non-Communicable Disease
30. **EHR**-Electronic Health Record System
31. **UISMPHCMI**- Unified Information System of Management of Public Health Care Medical Institute
32. **PMS**- Patient Management System
33. **QMS**- Quality Management System
34. **HPS**- Health Protection Service
35. **RAWP**- Risk Assessment at Workplace
36. **EMAC**- Emergency Medical Assistance Centre
37. **GMH** - Georgian Medical Holding

### 3. BACKGROUND

Access to timely, high-quality health information is an integral component of a well-functioning and responsive national health system. A strong and integrated routine health information system (HIS) which includes surveillance of diseases, health and well-being of the population, and of performance of the healthcare system is essential for evidence-based decision-making. It enables the policymakers to effectively and timely recognize and address the needs of the population.(1)

The HIS in Georgia is fragmented, largely paper-based, lacking interoperability and integration, and its content (data and final indicators) is of questionable quality. Therefore, WHO is committed to providing technical support to the government for HIS strengthening and digitalization.

The WHO/CO Georgia is implementing activities under the USAID-funded **multidimensional** program for **strengthening** digital HIS. In the scope of this program, WHO is **aiming** to (sub-activity 7.2) support the relevant **institutions** of the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs (MoIDPLHSA), National IT agency in strategy development and implementation of HIS improvements to strengthen data sources, data management, and data quality through the provision of intensive technical assistance for **mapping** of all **existing** data systems and reporting forms to reduce duplication in data collection; development of data input standards; and **proposing** a new lean health data structure to support optimization of data reporting.

To support these **activities**, under the USAID-funded project “WHO COVID-19 Response Program in Georgia”, the WHO **sought** technical assistance to support the report development based on the data and information collected for **existing** data recording and/or data reporting forms and data systems in primary healthcare (PHC) system of Georgia. ICMR-National Institute of Epidemiology (ICMR-NIE), Chennai India developed this report that includes the HIS data **flow** analyses and **mapping** and **strategy** development for HIS **strengthening**.

#### **The specific objectives were**

1. To understand the PHC data flow in Georgia, using the collected data as well as collecting additional data if needed.
2. Using the collected data to conduct mapping of data systems and reporting forms to reduce duplication in data collection.
3. Estimate possible benefits in terms of saved time and paper or improved data quality as a result of optimization of data recording through digitalization and interoperability.
4. Provide recommendations for improving data integration and interoperability.



## 4. SETTINGS

Georgia is situated in the South Caucasus. It borders the Russian Federation to the north and Turkey, Armenia and Azerbaijan to the south. It has two autonomous regions (Abkhazia and Adjara). Georgia is a semi-presidential republic, in that the president governs alongside a cabinet and prime minister. The total population of Georgia is 3.7 million (Geostat, 2016) with a sex ratio of 0.9:1 and 57.4% living in urban areas. In 2017, Georgia was classified as a lower-middle-income country. The poverty headcount ratio at the national poverty line was 21.3% of the population in 2016.(2)

As per the health care statistical yearbook 2021, the country is divided into 64 municipalities, including those within the two autonomous regions of Abkhazia and Adjara, and 12 cities. In addition, the country is divided into 11 administrative-territorial units, around which the health care system is organized.(3)

### Health System in Georgia

The country's health policy changed significantly in 2013 after a new government came to power. The new policy aimed to achieve universal health coverage, unlike the previous one that relied on market forces to improve the health system's efficiency.(4) Most medical service providers are autonomous due to earlier privatization. They used to contract with different private insurance companies, but now the Social Service Agencies buy all the services that the Universal Health Coverage Program covers. However, people still pay a lot for health care from their own pockets.(5)

### Organisation of Health System in Georgia

Georgia has a universal health care system that covers almost the entire population since 2013. The system is mainly based on private medical facilities receiving state funding for health services. The key institutions are described below and the overall organization of the health care system in Georgia is shown in **Figure 1**.(6)

#### **Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs (MoIDPLHSA)**

MoIDPLHSA is a government agency that is responsible for the health of the population, the oversight of the health system, the quality of health services and the equity in access to health care in Georgia. The MoIDPLHSA implements the Universal Health Coverage Program, which provides health care coverage to almost the whole population through a non-contributory social insurance model. The MoIDPLHSA also develops and executes the PHC Strategic Plan 2016–2023, which aims to strengthen the quality of PHC. The MoIDPLHSA works with various legal entities under its control, such as the Social Service Agency, the National Centre for Disease Control and Public Health, the State Regulation Agency for Medical Activities and the Emergency Situations Coordination and Urgent Assistance Centre.(6)

#### **Ministry of Finance (MoF)**

MoF is a government agency that manages the state budget and fiscal policy in Georgia, including the health sector. The MoF oversees the funding of the Universal Health Care Program, which provides health care coverage to the entire population through a non-contributory social insurance model. The MoF also supports the development of rural health clinics and other primary care access points, in collaboration with the State Office of Rural Health and the Primary Care Office. [The MoF works with international partners, such as the European Union and the United States, to comply with sanctions and attract investments in the health sector.](#)(6)

### **The Ministry of Economy and Sustainable Development (MoESD)**

MoESD is a government agency that regulates economic activity in Georgia, including the health sector. The MoESD collaborates with the MoIDPLHSA to ensure the provision of medical and public health services to the population. The MoESD also supports the development of health infrastructure, such as tourist facilities and simulation spaces for medical education. The MoESD works with international partners, such as the European Union and the European Bank for Reconstruction and Development, to attract investments and improve trade capacity in the health sector.(6)

### **The Ministry of Environment Protection and Agriculture of Georgia (MoEPA)**

MoEPA is a government agency that oversees the agricultural sector and environment protection in Georgia. The MoEPA works with the MoIDPLHSA to ensure the safety and quality of food products, as well as to prevent and manage environmental risks that may harm public health. The MoEPA also supports the improvement of rural areas, where most PHC services are provided, by enhancing infrastructure, irrigation, land use and agricultural output.(7)

### **The Social Services Agency (SSA)**

The SSA is a state subordinated institution under the administration of MoIDPLHSA and, among other roles, it administers service purchasing in accordance with the Universal Health Care Program and 23 other health Programs by purchasing services according to a fixed price list.(6)

### **State Regulation Agency for Medical Activities (SRAMA)**

SRAMA is part of MoIDPLHSA and is formally responsible for issuing the licences for medical activities and permits for health care facilities and pharmacies, as well as regulating medical professionals, pharmaceuticals, and medical devices. However, its role is made difficult by the lack of a clear legal framework for regulating the health system and limited resources.(6)

### **National Centre for Disease Control and Public Health (NCDC)**

As part of large-scale reforms of the Sanitary–Epidemiological Service, it was established in 1996 from the epidemiological divisions of the Republican Sanitary–Epidemiological Station. In 2003, the Medical Statistics and Information Centre and, then in 2007, the Public Health Department, were integrated into the NCDC, which is responsible for public health in Georgia,

including immunization, surveillance, disease prevention, health promotion and the laboratory system.(6)

### **Service for Accounting, Reporting and Auditing Supervision (SARAS)**

The Ministry of Finance of Georgia oversees a subordinated agency, the Service for Accounting, Reporting and Auditing Supervision, which supervises accounting, reporting, and auditing in compliance with the Georgian legislation. The organisation’s main function is to establish laws and monitor financial flow for various organisations, such as polyclinics.(8)

### **Resolution of the Government of Georgia No. 317 (RoGG)**

The Georgian Law on Nuclear and Radiation Safety establishes a technical regulation, Resolution of the Government of Georgia No. 317, on “Radiation Safety Requirements in the Sphere of Medical Irradiation”. This technical regulation sets the standards for medical irradiation and collects data on the related activities. It also collects data on the risk assessment of the workplace to ensure safety.(9)

### **The National Statistical Service of Georgia (NSSG)**

The National Statistical Service of Georgia, a Legal Entity of the Public Law under the Ministry of Economy and Sustainable Development of Georgia, oversees conducting censuses on population, agriculture, and other topics in Georgia. It also collects data on manpower and human resources for polyclinics (institutes/organisations) through an online questionnaire service called Statistical form. (10)

### **The National Public Registry Agency of Ministry of Justice (NPRA)**

The NAPR is a legal entity of public law under the Ministry of Justice of Georgia. It provides about 265 services to individuals or legal entities, such as land registration, addresses, geodetic survey and more.(6)

### **Professional representation (Medical Associations)**

Since 2005, the major activity for professional associations has nominally been to support MoIDPLHSA in its endeavour to elaborate national clinical practice guidelines and protocols. MoIDPLHSA brings together funds for this initiative from budget sources and various international partners and invites professional associations to work on specific areas of expertise. Yet, few professional associations have been stewards of quality – setting and maintaining standards in specialties and shaping practice expectations. Only a few of the professional associations have high membership as the value or benefits offered do not resonate with physicians. (6)

### **Georgian Medical Holdings (GMH)**

The GMH was established in 2020.GMH plays a crucial role in improving the management of state clinics, particularly around primary healthcare (PHC).

### **Private insurance companies**

From 2007, private insurance companies were key stakeholders in the health system and their market grew exponentially as they were the main purchasers of the government-funded package of benefits. From 2010, they became vertically integrated purchaser–providers for whole regions but, in 2013, the purchasing role was passed back to the Social Services Agency, although many employees still have private health insurance as an employment ‘perk’. Since April 2017, the highest income households have been excluded from the government-funded package of benefits and are expected to have private health insurance.(6)

### **International partners**

Numerous international partners have strongly supported the health sector in Georgia. In Georgia's healthcare sector, various international partners collaborate to enhance services and address health challenges:

1. World Health Organization (WHO) - provides data, analysis, and policy advice on health system organization, financing, resources, and more.
2. UNICEF - works with the government to improve maternal and child health, nutrition, immunization, and child protection.
3. UNFPA - supports the national reproductive health strategy, gender-based violence prevention, and youth empowerment.
4. World Bank - offers financing and technical aid for healthcare system strengthening primary care reform, disease control, and emergency response.
5. USAID - improves health outcomes for those with HIV/AIDS, tuberculosis, and infectious diseases while enhancing health system governance and quality.
6. EU - aids in harmonizing health policies, developing e-health services, and enhancing the health workforce.
7. Global Fund - provides grants for HIV/AIDS, tuberculosis, malaria interventions, and health system strengthening.

These partners collectively contribute to Georgia's healthcare progress, addressing various health issues and supporting system development. Additional international partners may also be involved, reflecting a comprehensive approach to healthcare improvement in the country. Many have permanent offices in the country, largely supporting developments in health and social sectors. (6)

### **PHC System in Georgia**

Due to the various reforms, PHC service provision experienced major changes in its organization and financing. The previous Semashko model consisted of a centralized system of polyclinics in each area, with rural health centres and first-aid posts at the lowest level, all reporting to the district hospital, which was in charge of all the district's funds. From 1997 onwards, the polyclinics in a district became independent legal entities that ran and contracted

for all PHC and outpatient specialized services. Most of these facilities belonged to the State, but they were privatized after the 2007 reform wave. In rural areas, doctors worked for themselves and had their own PHC budgets, and the State Service Agency purchaser directly contracted them.(6)

By 2011, most PHC facilities had been sold to private owners. The reform efforts between 2007 and 2010, when private insurers were running State-funded programmes for the poor, led to a large part of the health provider network being owned by private insurers. Currently, most health providers are private for-profit entities owned by private insurers, medical corporations or independent private facilities. Few PHC facilities are still publicly owned. Specialized services such as TB care dispensaries, mental health care units, HIV and hepatitis C treatment clinics, and antenatal clinics offer services under the specific State programmes. There is a process of merging specialized services with general primary care services: for example, PHC facilities contract TB specialists (doctors and nurses) to do their work as part of the TB State programme. As a result, in recent years the number of old, separate dispensaries have decreased.

The PHC system is not well coordinated, with different modes of organization. PHC is offered under various health-care programs, such as the Universal Health Care Program, the Rural Doctors Program and some vertical health programs. In rural areas, PHC is delivered by separate family medicine practices where one family doctor and one nurse work together. The family medicine team has to serve the population in a specific geographical area and to refer patients to an urban PHC provider for more diagnostic tests and specialist consultations if needed. However, patients often choose to skip PHC and pay out-of-pocket to see specialists without referral, call an ambulance or go to the hospital emergency department. Urban areas are mostly served by private providers through polyclinics (adult and paediatric), family medicine centres (mainly in four big cities), women's consultations, reproductive health centres and municipal (formerly known as rayon- an administrative division that was inherited from the Soviet Union and abolished in 2006) medical centres. All private PHC providers are commercial for-profit legal entities registered as limited liability companies or as joint stock companies if large hospitals or part of a network. Since 2012, many PHC service providers have been merged with private insurance companies and are owned by the local hospital. This has created an incentive to increase profits by serving patients in the hospital rather than in PHC settings.(11) The details of the PHC services are enlisted in **Table 1.** (12)

## **Monitoring and Information System**

Health reporting starts from the lowest level of service provision from both public and private PHC providers (rural doctor under the GMH Rural Doctor's program, ambulatory) and follows the established forms, frequency and hierarchy of reporting. Only 20% of PHC facilities use electronic records, while 80% continue with paper-based records.(10)

The Medical Statistics Department at the NCDC is responsible for monitoring, evaluation and analysis of the population health status. The medical statistics yearbook is produced on an annual basis and provides descriptive and some analytical information derived from the routine Health Information System and surveys.

In recent years significant resources have been invested to strengthen communicable disease surveillance and response systems in the country, and an effective system is operational to identify and respond to epidemics.

“E-Health” – an innovative, comprehensive electronic information system to capture information on all aspects of health care in Georgia was launched in September 2021 by WHO, the project is funded by the European Union; the MoIDPLHSA of Georgia; the United Nations Children’s Fund; the United Nations Office for Project Services; and the United Nations Population Fund.(10)

The system is built around a citizen’s ID number; different modules are created to gather information from various programmes, including those in the areas of universal health coverage, rural doctors, maternal and child health, immunization, TB care and mental health. Currently, paper-based reporting is still in place, while E-Health is mainly used to control programmes from a financial perspective, and there is limited use of the data for service volume or quality monitoring purposes. Different health information systems are in operation for specific areas, such as HIV/AIDS, TB, immunization, hepatitis C, and communicable diseases, even though the data collection forms are part of the regular Health Information System. The data quality may differ across different areas, depending on how much monitoring and supervision and data analysis are done.(10)

Before the COVID-19 pandemic, many people did not utilize PHC services and were not aware of their assigned PHC provider, but a digital portal (<http://ambulatoria.moh.gov.ge>) launched in November 2020 enabled people to connect with family doctors and clinics where they were registered if they developed COVID-19 symptoms. Individuals not registered with any PHC provider were assigned a family doctor in accordance with their place of residence. According to the Ministry, several thousand people were registered for the first time.

In addition, between September 2020 and May 2021, the 112-emergency service transferred 322 735 calls to PHC online clinics from which ambulances were dispatched for only 8555 cases (2.7% of all calls), and 23 592 (7.3%) cases were eventually hospitalized. The COVID-19 response has both increased demand for PHC services and demonstrated the critical role PHC plays in the health system. It has highlighted the need for further investment and strengthening of PHC in Georgia as well as increased awareness regarding the use of enhanced digital tools in enabling the transformation towards a more responsive, accessible and people-centred PHC model.(13)

## **5. METHODS**

This evaluation has employed a comprehensive desk review of various available data fields (variables) used for reporting under the HIS in PHC System of Georgia. Using a data collection instrument, information was collected about the forms being used in the HIS for PHC system of Georgia. The various data fields (variables, n=5705) under the forms/modules (n=191) were compiled in MS Excel format with each row referring to a variable used in the form and columns referring to the description of the variable. With the support of MoIDPLHSA, this MS Excel was compiled by WHO CO Geogia and shared with ICMR-NIE.

The key information under description of each variable include ID form, data variable name, variable format, form name, format of form, collection of individual versus aggregated data, healthcare facility type, type of form, data collection from primary source versus reporting, source of data, where should collected data be reported, who is the main responsible staff to fill out the form, whether data is from primary source or secondary, problems for data collection in this form, what are the suggestions to import data collection and notes about form.

We analysed the data flow from each person involved in data collection, the format used for data collection and their reporting hierarchy. We did the following to map the forms used in PHC system under the data management system. We grouped all the forms based on the service provided. We verified the details of these groups of forms (source, reporting, type of data, reporting person, etc) in the data form sheet provided. We listed the variables in these common forms and checked for duplication. We then mapped the forms to reduce the duplications, and to improve digitalization, integration and interoperability. After reviewing the collected data, we have summarized the suggestions for better data collection. We have also provided recommendations for enhancing the HIS in PHC of Georgia based on our review.

## 6. RESULTS

### **Objective 1. To understand the primary healthcare data flow in Georgia, using the collected data**

The PHC data in Georgia used four major data management systems: i) Unified Information System of Management of PHC Medical Institution ii) Electronic Health Records System iii) Patient Management System and iv) Quality Management System. The Unified Information System of Management of PHC Medical Institution and Quality Management System are collecting electronic, paper format, excel data.

After data cleaning, we could find 188 forms/modules/registers/journals/logs used at the polyclinic level of Georgia. The list of forms and their form IDs are enlisted in **Table 2**. Among them, data is being captured electronically for 91 forms/modules, in paper format for 89 forms/modules and in MS Excel for 8 forms/ modules. The overview of forms collected in polyclinics are enlisted in **Table 3**. Form 01 is the annual report of the medical institution (list of annual electronic forms of departmental statistical reports to be submitted by medical institutions and submission deadlines), all other forms are to filled monthly or daily. The MS Excel file contained two qualitative questions regarding the electronic portal use. All electronic portal users revealed low portal speed as the main problem, and they suggested to improve the same.

The forms in the polyclinics are collected from the PHC providers (doctors, nurses) and by the managers (human resource managers, statisticians and others). From the person responsible for the data collection, the data will either go to the data management system and report to the state agencies/ Legal Entities of the Public Law or they will be directly reported to the state agencies and concerned ministries. Of the 188 forms, the doctor is responsible person for filling out 40 forms, whereas nurse is responsible for 46 forms, statistician is for 43 forms, human resource manager for 12 forms and 41 forms collected by others. Six forms are filled out at the registration. We summarised the flow of data based on the person responsible for data collection.

#### **The flow of data in the forms collected by the Doctors**

The doctor collects various forms of data: 30 paper-based, 6 electronic and 4 excel forms. The Unified Information System of Management of PHC Medical Institution collects 19 paper-based forms and reports 17 of them to the legal entity of Public Law - National Public Registry Agency of the Ministry of Justice and MoIDPLHSA. The remaining 2 forms are reported directly to MoIDPLHSA. The doctor also reports 8 paper-based forms to National Centre For Disease Control & Public Health, 2 paper-based forms directly to MoIDPLHSA, one paper-based form to Resolution of the Government of Georgia No.317 and one paper-based form to MoIDPLHSA through a special accounting journal.

The doctors at the polyclinic collect 6 forms electronically. Out of them, 4 are collected through Unified Information System of Management of PHC Medical Institution and 2 are reported to National Centre for Disease Control & Public Health and the remaining 2 are reported to National Public Registry Agency of the Ministry of Justice. One form is reported through Quality Management System to Family Medicine Office Service Standards and then to



MoIDPLHSA, one form is directly reported to National Public Registry Agency of the Ministry of Justice.

The doctors collect variables in 4 excel-based form. Out of them, 2 are reported to Unified Information System of Management of PHC Medical Institution data management system and then to MoIDPLHSA one is reported to the National Centre for Public Health and another one is reported directly to MoIDPLHSA. The detailed data flow is showed in the **Figure 2**.

### **The flow of data in the forms collected by the Nurses**

Most of the variables collected by nurses in the PHC system of Georgia are in paper format. They collect 46 forms in total, out of which 34 are paper format, 11 are electronic and one is excel format. They report 10 paper format forms on medical irradiation safety to MoIDPLHSA under Resolution of the Government of Georgia No.317. They also report 9 paper format forms to Family Medicine Office Service Standards and MoIDPLHSA through Quality Management Services. Another 9 paper format forms are reported to the National Centre for Public Health and MoIDPLHSA. They report 4 paper format forms to Unified Information System Of Management of PHC Medical Institution data management system, and 3 of them are further reported to MoIDPLHSA through National Public Registry Agency of the Ministry of Justice and one is directly reported to MoIDPLHSA. They collect 11 electronic forms and report 6 of them to MoIDPLHSA through National Centre for Disease Control and Public Health and the other 5 directly to MoIDPLHSA. They also collect one excel based form and report it to National Public Registry Agency Through Unified Information System of Management of PHC Medical Institution data management system. **The Figure 3** shows the details of the data flow.

### **The flow of data in the forms collected by the Statistician**

The statisticians collect 43 forms in total from the PHC System of Georgia. They collect 32 forms in electronic forms, 10 forms in paper formats and one form in excel format. They report 16 electronic forms to various state agencies and ministries through Unified Information System of Management of PHC Medical Institution data management system. They also report 2 electronic forms to MoIDPLHSA through Quality Management System and one electronic form to MoIDPLHSA through Electronic Health Record system. The rest of the electronic forms are reported directly to MoIDPLHSA. They report 9 paper formats to National Centre for Public Health and MoIDPLHSA and one paper format to MoIDPLHSA through Health Protection Services. They collect the work done by doctors in excel format. The detailed data flow is showed in the **Figure 4**.

### **The flow of data in the forms collected by the Human Resource Managers**

There were 12 forms collected by Human Resource Managers. Among them 6 were collected electronically and 6 were collected in paper format. There were 5 electronic forms and 6 paper based forms collected under Quality Management System and reported to MoIDPLHSA through Family Medicine Office Service Standards. One electronic form is collected and reported to National Centre for Disease Control & Public Health. The detailed data flow is showed in the **Figure 5**.

### **The flow of data in the forms collected by Others in the PHC System in Georgia**

Out of the 188 forms in total, 41 forms were collected by other staff (other than doctor, nurse, human resource manager or statistician). Of these 41 forms, 32 were electronic, 7 were paper based, and 2 were in excel format. The Quality Management System received data from 24 electronic and 4 paper based forms and reported to Family Medicine Office Service Standards. The Service for Accounting, Reporting and Auditing Supervision received data from 8 forms, of which 6 were electronic and 2 were in excel format. The Unified Information System of Management of PHC Medical Institution data system collected data from one electronic form and reported to National Public Registry Agency of Ministry of Justice and National Centre for Public Health. The Patient Management System received data from one electronic form and reported to Family Medicine Office Service Standards. The detailed data flow is showed in the **Figure 6**.

### **The flow of data in the forms collected during registration**

Six forms are used for various registration processes in the PHC set up of Georgia. Four of these forms are electronic and two are paper based. Two electronic forms and two paper forms collect data under the Unified Information System of Management of PHC Medical Institution data system and report to National Public Registry Agency. The other two electronic forms collect data under the Quality Management System and report to MoIDPLHSA through Family Medicine Office Service Standards. The detailed data flow is showed in the **Figure 7**.

### **The flow of data based on the data management systems in the PHC System in Georgia**

The main data management systems are Unified Information System of Management of PHC Medical Institute (of National Centre for Disease Control and Public Health) and Quality Management System (of Family Medicine Office Service Standards). The Electronic Health Record system and Public Health and Patient Management system are used for only one form and three forms, respectively.

The data system of the Unified Information System of Management of PHC Medical Institution, under the National Centre for Disease Control and Public Health, gathers most of the data on the PHC system of Georgia and reports it to two state organizations: National Centre for Disease Control and Public Health and National Public Registry Agency of the Ministry of Justice of Georgia.

Electronic Health Records System collects data on PHC facilities using the “medical facility manager page” module and reports it to National Centre for Disease Control and Public Health. The Unified Information System of Management of PHC Medical Institution also collects data on various PHC services, such as psychotropic drugs regulation, inventory/accounts management, outpatient services, child immunization service, notifications/reports, chronic disease screening & surveillance, registers, COVID-19 vaccine promotion and human resource management and reports it to National Centre for Disease Control and Public Health. The form “Prescription blank form for prescription of narcotic drug (prescription blank yellow color) - attachment No. 1” is collected in a special accounting journal under the National Centre for Disease Control and Public Health. **Table 4 & 5** provides more details on the forms collected under these services.

One of the sources of data for the National Public Registry Agency of the Ministry of Justice of Georgia is the Unified Information System of Management of PHC Medical Institution. This system collects data on a range of topics, including vital events registration, Hepatitis C monitoring, COVID-19, cancer screening and management, outpatient services and registers, outpatient service financial and human resource management, maternal health, and city hall reports. Another source of data is the social protection programs of Tbilisi City Hall, which collect data on disease screening, cancer screening and management, and outpatient service human resource management. The forms used for data collection by these sources are detailed in **Table 6 and 7**.

The Family medicine office service standards involve two data systems: the Patient Management System and the Quality Management System. The latter collects more forms than the former. The only form collected by the Patient Management System is “Objectives - Strategic Event Planning Form - F-MI-01A-01”. The Quality Management System collects forms from various areas of PHC services quality management, such as is infection, workplace safety, vendor, patient movement, human resource, institute and NCD register. **Table 8 and 9** provide the details of these forms.

The Georgian Law on Nuclear and Radiation Safety establishes a technical regulation, Resolution of the Government of Georgia No. 317, on “Radiation Safety Requirements in the Sphere of Medical Irradiation”. This technical regulation sets the standards for medical irradiation and collects data on the related activities. It also collects data on the risk assessment of the workplace to ensure safety. **Table 10** shows the details of the forms used for data collection by this technical regulation.

The Ministry of Finance of Georgia oversees a subordinated agency, the Service for Accounting, Reporting and Auditing Supervision (SARAS), which supervises accounting, reporting and auditing in compliance with the Georgian legislation. The organisation’s main function is to establish laws and monitor financial flow for various organisations, such as polyclinics. The forms that SARAS collects are shown in **Table 11**.

The National Statistical Service of Georgia, a Legal Entity of Public Law under the Ministry of Economy and Sustainable Development of Georgia, oversees conducting censuses on population, agriculture and other topics in Georgia. It also collects data on manpower and human resources for polyclinics (institutes/organisations) through an online questionnaire service called Statistical form.

The form “Prescription blank form for prescription of narcotic drug (prescription blank yellow color) - attachment No. 1” collected in special accounting journal under the National Centre for Disease Control and Public Health.

### **Support system for queries regarding data capture in HIS**

Support system exists to address the doubts regarding data entry in the forms- telephone (+995 32) 2510021 and email [contact@moh.gov.ge](mailto:contact@moh.gov.ge)

## **Objective 2. Using the collected data to conduct mapping of data systems and reporting forms with a view to reducing duplication in data collection**

The forms collecting various variables are mapped based on the services under PHC and with the suggestions to reducing the duplication in data collection. There were broadly cancer related forms, COVID-19 related forms, maternal health related forms, child health related forms, birth and death registration forms, registration related forms, vaccination related forms, human resource management related forms, stocks management related forms, outpatient related forms, notifications reports and surveys, accounts/financial management related forms, state medical records, disinfection and sanitation related forms, prescription related forms, laboratory service related forms, radiation related forms, workplace safety related forms, screening of disease/risk factor related forms and miscellaneous forms. Under each mapped groups, the suggestion to reduce the duplication is added.

### **1. Cancer related forms**

- a. "Cervical cancer screening" - municipal oncoprevention program - Pap Test (form 23)
- b. "Management of prostate cancer" - municipal oncoprevention program – PSA (form 26)
- c. "Cervical cancer screening" - Unified Cancer Information System (form 27)
- d. "Prostate cancer management" - Unified Cancer Information System (form 28)

### **Suggestions**

- i) The variables collected in both forms 23 and 26 are the same. Both the data are reported to Tbilisi city hall. Hence single portal can be developed with drop down option for gender, diagnosis, laboratory investigations.
- ii) The variables collected in both forms 27 & 28 are the same. Both the data are reported to the National Centre for Disease Control and Public Health. Hence single portal can be developed with drop down option for gender, diagnosis, laboratory investigations.

### **2. COVID-19 related forms**

- a. N42-Remote management of confirmed cases of COVID-19 at the home (form 8)
- b. N41 Promotion of vaccination against COVID-19 (form 9)
- c. N41 Covid-19 Vaccination Promotion Form (form 40)
- d. Management of novel coronavirus disease COVID-19/Diagnosis form for COVID-19 (form 20)
- e. Financial reporting of the Covid Laboratory system (form 21)

### **Suggestions**

- i) Promotion of vaccination against COVID-19 is collected electronically by form 9 and form 40 (over the age of 60 years) in both primary and secondary formats. It is suggested to merge the variables from both the forms and conduct single primary data collection in electronic format.
- ii) A single unique electronic portal or app needs to be developed for COVID-19 which should have all modules from beneficiary personal details, investigations, vaccination.

### **3. Maternal health related forms**

- a. N14 Antenatal care (form 14)
- b. Ante/perinatal anamnesis - form No. IV-200-9/a (form 115)

**Suggestions**

- i) Since electronic data entry happens from secondary source, it is suggested an antenatal services portal to be developed where all details on mother and child can be filled by field level workers and data gets automatically generated in form 14 by entering beneficiary ID.

**4. Child health related forms**

- a. Planned surveillance form - form No. IV-200-10/a (form 116)
- b. Basic preventive services for children aged 0-6 years (form 130)
- c. Documentation of child abuse/sexual abuse - form No. IV-200-5/g (form 129)

**Suggestions**

- i) In form 116, general examination, systemic examination, details on child abuse and immunization are collected up to the age of 18 years. In form 130, the same variables are collected up to the age of 6 years. In form 129, details on child abuse are collected. Hence, instead of three forms which collect same information, single form can collect all variables in an electronic format.

**5. Birth and death registration forms**

- a. Birth register - statistical form (form 43)
- b. Birth Death Module (form 45)

**Suggestions**

- i) It is advised to link form 43 with planned surveillance form - form No. IV-200-10/a (form 116), child registration log by year of birth (form 77), immunisation forms for child with a unique ID.
- ii) The potential duplications are the beneficiary's personal details and the mother's personal details which can be transferred from the beneficiary registration module (form 44) by entering the personal ID of both. This module can be used only to record birth-related detail. If this module is linked to the national survey system, it will aggregate the total number of births as the beneficiaries register their birth.

**6. Registration related forms**

- a. Beneficiary registration module (form 44)
- b. Planned ambulatory services (completed work) \_1 (form 12)
- c. Case register (form 59)
- d. Registration of an infectious disease in a medical institution (Journal No. 60/A) (form 64)
- e. Registration of a disease/condition subject to urgent notification in the Supreme Court (Journal - No. 60/B)(form 65)
- f. Form 1.1. Child registration log by year of birth (form 77)
- g. Form No. IV-200/a Name of the person/institution providing outpatient services (form 105)
- h. Outpatient registration journal - form No. IV-200-12/a (form 118)

- i. Registration log of outpatient visits and calls to the home/place - form No. IV-200-13/a (form 119)
- j. Patient internal fixation log (form 184)
- k. Patient withdrawal/reattachment log (form 185)
- l. Register of non-communicable diseases (form 187)

### **Suggestions**

- i) A Georgian citizen has to register in a beneficiary registration module to avail primary health care. With this personal ID, the beneficiary's details can automatically be generated and linked to the service-specific forms or modules. The beneficiary registration module can generate a Personal ID for each beneficiary added and type of service he/she wanted to opt (i.e universal health coverage, psychiatric services, etc.). During the process, the beneficiary's details will be collected.
- ii) Since the variables are common in both form 64 and form 65, a single electronic portal needs to be developed for infectious diseases with modules for registration in a medical institution and urgent notification in the supreme court.
- iii) Child registration log by year of birth must be linked with birth register statistical form (form 43).
- iv) Since the variables in both form 118 and 119 are same, there must be single electronic portal for outpatient registration.
- v) Since the variables in both form 184 and 185 are same, there must be single electronic portal for patient internal fixation log and patient withdrawal/reattachment log. Using Patient ID, basic information can be automatically obtained, followed by drop down at the end mentioning internal fixation and withdrawal/reattachment.
- vi) There should be link between N14 Diabetes management - specialist outpatient care form (form 10), chronic disease surveillance form (57) with the register of non-communicable diseases (form 187).

### **7. Vaccination related forms**

- a) Form 1.3 Vaccination plan for the next year (form 79)
- b) Form 1.4 Journal of monthly planning and registration of vaccinations (form 80)
- c) Form 1.5. More than 1 month, a log of permanent contraindications and rejections (form 81)
- d) 1.6 Record book of circulation of vaccines, solvents, syringes and disposal boxes (form 82)
- e) Form 1.7 Temperature registration in the refrigerator (form 83)
- f) Form 1.8. (form 84)
- g) Form 1.9. A table for calculating the need for amazing materials (form 86)
- h) Monitoring schedule of rejection and contraindications (%) for DKT+ Bhep+hib+IPV (form 87)
- i) Vaccine Expenditure Indicator Form (form 88)
- j) Timeliness monitoring of Hexa3 to be conducted before the age of 5 months and 29 days (form 89)
- k) Children under 1 year of age with hexa 3 injections of blueberry indicatoris forma (form 90)
- l) "Map of preventive vaccinations - form 063" (form 92)
- m) Immunization system (form 93)

- n) Immunization table - Form No. IV-200-1/a - Appendix No. 2 (form 106)

### **Suggestions**

- i) To develop electronic vaccine information portal containing modules for vaccination, stocks, temperature maintenance, beneficiaries, etc
- ii) To merge Form 81, form 84, form 87, form 89, form 90 into single electronic portal as it contains similar variables related to Hexa and contraindications.
- iii) To merge Form 80, form 92, form 93, form 106 into single electronic portal as it contains similar variables related to vaccination.

### **8. Human Resource Management related forms**

- a. eHealth users (form 49)
- b. Medical facility manager page (form 50)
- c. statistical form (form 91)
- d. Work time registration form (form 132)
- e. Stakeholders and their expectations - F-MI-01C-01 (form 148)
- f. Objectives - Strategic Event Planning Form - F-MI-01A-01 (form 149)
- g. Assessment of positive and negative factors of the organization (SWOT analysis) - F-MI-01B-01 (form 150)
- h. Process reporting form - F-MI-01D-01 (form 153)
- i. Documentation review journal - F- MI- 02D-01 (form 154)
- j. Journal of registration of changes - F- MI – 02E-01 (form 155)
- k. Internal Documented Information List - F-MI-02B-01 (form 156)
- l. List of documented information - F-MI-02C-01 (form 157)
- m. List of external documented information - F-MI-02A-01 (form 158)
- n. Internal audit plan - MI 03 (form 159)
- o. Internal audit registration log - 1 F-MI 03-A-01 (form 160)
- p. Program for conducting internal audits (form 161)
- q. Internal Audit Plan - F-MI-03B-01 (form 162)
- r. Internal Audit Report - F-MI-03C-01 (form 163)
- s. Correction and Corrective Action Plan - F-MI-04A-01 (form 164)
- t. Journal of non-compliance registration - F-MI - 05D – 01 (form 165)
- u. Nonconformance Management - F-MI 05A – 01 (form 166)
- v. Advertising magazine - F-MI - 05C – 01 (form 167)
- w. Application form - F-MI 05B – 01 (form 168)
- x. The work done by the doctor (form 191)
- y. Human resources management - PD – 01 (form 194)
- z. Application for staffing needs (form 195)
- aa. Job Seeker Evaluation Form (form 196)
- bb. Final Evaluation Form - F-PD-01C-01 (form 197)
- cc. Introductory Instruction Registration Log - F-PD-01D-01 (form 198)
- dd. On-the-job training registration log - F-PD-01E-01 (form 199)
- ee. Probationary evaluation form - F-PD-01F-01 (form 200)
- ff. Application for employee training (form 201)
- gg. Personnel Evaluation Form - F-PD-01H-01 (form 202)
- hh. Journal of registration of personnel training (form 203)
- ii. Personnel HR database (form 204)

## **Suggestions**

- i) Unique institution code, unique employer and employee code needs to be developed.
- ii) Form 156, form 157, form 158 can be merged into a single form as it contains similar variables on documentation.
- iii) Form 159 and form 162 on audits are duplicates.
- iv) Forms 159-163 on audits can be merged into single electronic portal.
- v) Forms 195 and 201 on staffing needs/training are duplicates.
- vi) Single electronic form needs to be developed for the job seeker evaluation by combining form 194, form 196, form 197.
- vii) Form 167 and form 168 on advertising/application form needs to be merged.
- viii) Form 198 and form 199 on training are duplicates.
- ix) Evaluation forms like form 150, form 200, form 202, form 203 needs to be merged.
- x) Forms 154 and form 155 on journal review needs to be merged.

## **9. Stocks Management related forms**

- a. Form of good received (form 95)
- b. Form of goods returned to issuer (form 98)
- c. Form of written off goods (form 99)
- d. Expired good form (form 100)
- e. Balance form (form 101)
- f. With the balance period (form 102)
- g. Inventory form (form 103)
- h. Capacity of polyclinics and outpatient clinics (form 144)
- i. Application for purchase - F-PD-02A-01 (form 188)
- j. Initial vendor evaluation - F-PD-02B-01 (form 189)
- k. Current vendor evaluation - F-PD-02D-01 (form 190)

## **Suggestions**

- i) A single electronic portal with unique serial number, party code, and item serial number needs to be developed.
- ii) Inventory form (form 103) can be linked with form of good received (form 95), form of good returned to issuer (form 98), form of written off goods (form 99)
- iii) Expired good form (form 100), balance form (form 101), with the balance period (form 102) can be linked
- iv) Can link application for purchase - F-PD-02A-01 (form 188), initial vendor evaluation - F-PD-02B-01 (form 189), current vendor evaluation - F-PD-02D-01 (form 190)

## **10. Outpatient related forms**

- a. Scheduled outpatient clinic - statistical form\_1 (form 5)
- b. N14 Outpatient palliative care of incurable patients (form 6)
- c. Planned outpatient clinic - capitation\_1 (form 11)
- d. Planned ambulatory services (completed work)\_1 (form 12)
- e. City Hall - Home Care Annex N3 Register of Beneficiaries (For the socially vulnerable) (form 13)
- f. Table of general data - form No. IV-200-2/a (form 107)
- g. Table of final diagnoses - form No. IV-200-3/a (form 109)
- h. For providers of primary health care services - form No. IV-200-4/a (form 110)



- i. Results of clinical-diagnostic examination - form No. IV-200-6/a (form 112)
- j. Protocol of medical intervention No. - Form No. IV-200-7/a (form 113)
- k. Written informed consent of the patient for the provision of medical services - form No. IV-200-8/a (form 114)
- l. Referral card (form 124)
- m. X-ray referral registration log (form 125)
- n. Beneficiary's consent to registration in a medical institution for receiving outpatient services within the framework of the state program of universal health protection (form 128)
- o. Management Plan - (Diagnostic Services/Treatment - Drug/Non-drug) (form 131)

### **Suggestions**

- i) Single electronic beneficiary ID/patient ID for outpatient visits needs to be developed.
- ii) An electronic health information portal needs to be developed with unique patient ID. After each patient is seen, the doctor or the nurse enters the details of patient complaints, investigations and management in it.
- iii) Form 5 (scheduled outpatient clinic-statistical form) can be linked to form 107, form 109, form 112, form 113, form 131 to avoid duplication.
- iv) Form 13 for vulnerable groups is collected only in city hall. It is recommended that this information be collected in rural hospitals also.

## **11. Notifications reports and surveys**

- a. Notification form - case.moh.gov.ge (form 41)
- b. Urgent notification card (form No. 58/1) (form 66)
- c. Aggregated/Monthly Notification of Certain Diseases/Conditions - Form 58/3 (form 67)
- d. Weekly Standard Form of Influenza-like Illness/Severe Acute Respiratory Infection Cases (form 68)
- e. Monthly mandatory notification form on the number of narcotic drugs prescribed by the polyclinic and dispensed by the pharmacy during the mutual comparison period - Appendix No. 3 (form 69)
- f. Quarterly, mandatory reporting form of the Drug Control Inspection on the number of narcotic drugs issued for onco-curable and somatic patients and their needs - Appendix No. 4 (form 70)
- g. Form 1.2 Report on population age groups (form 78)
- h. Report on preventive vaccinations carried out - form IV-04 (1.8) (form 85)
- i. Form No. 39 (Work done by doctor report) (form 104)
- j. Journal of registration of telephone grams (form 183)
- k. Annual report-form 01 (form 56)

### **Suggestions**

- i) Monthly and quarterly mandatory notification form (form 69 and form 70) can be made as two modules and can be linked to an electronic portal.
- ii) Form 104 can be linked to work done by doctor's form (form 191 under HR). Also, the source and reporting of form 104 is not clear.

## **12. Accounts/Financial Management related forms**

- a. General and administrative expense form (form 29)
- b. Income statement form (form 30)
- c. Amalgamated Income Statement - Consolidated results of operations (form 31)
- d. Capital flow (form 32)
- e. Profit Loss Profitability Margin Form (form 35)
- f. Balance (form 36)
- g. cash flow (form 37)
- h. Value added tax declaration form (form 39)
- i. Hospital sheet accounting registration journal (form 120 and 123)
- j. Receipt of s/sheets and balances – warehouse (form 121)
- k. Receipt of s/sheets and balances – issuance (form 122)

### **Suggestions**

- i) Most of the forms reporting to accounting, reporting and audit supervision service are electronic based. It is advisable to merge all portals into a single electronic portal with different modules.
- ii) Form 121 and form 122 are paper based forms with same variables. They can be clubbed to a single electronic portal.

### **13. State medical records**

- a. Electronic Health Records (EHR) System (form 48)
- b. Rural Doctor State Program (form 60)
- c. The form of a Village nurse - the state program of a Village doctor (form 61)

### **Suggestions**

- i) The variables in form 60 and form 61 are similar. Hence a single electronic portal can be developed with two modules for rural doctor and rural nurse to avoid duplication.
- ii) All the paper-based form under OPD services can be linked to electronic Health Records System (EHR)

### **14. Disinfection and sanitation related forms**

- a. Equipment disinfection work registration log - (F – SOP – 008C 01) (form 170)
- b. Registration log of dry, hot air sterilization in the cabinet - (F – SOP – 008D 01) (form 171)
- c. Registration log of autoclave dry steam sterilization works - (F – SOP – 008E 01) (form 172)
- d. Disinfectant outcome preparation registration log - (F – SOP – 008F 01) (form 173)
- e. Journal of registration of chemical (cold) sterilization works - (F – SOP – 008G 01) (form 174)
- f. Journal of registration of disinfection works - (F – SOP – 008 A 01) (form 175)

### **Suggestions**

- i) Since all forms are paper based, it is suggested to convert them into single electronic portal with different modules.

### **15. Prescription related forms**

- a. Form No. 2 - psychotropic drugs - electronic prescription (form 51)

- b. Journal of Psychotropic Medication Registration (form 52)
- c. Electronic prescription system (form 53)
- d. Electronic prescription management system by the manager of the medical facility (form 55)
- e. Prescription blank form for prescription of narcotic drug (prescription blank yellow color) - attachment No. 1 (form 71)
- f. Provisional rule for the appointment, prescription and purchase, storage, registration, issuance, write-off and destruction of special prescription forms for medicinal products subject to special control - Appendix No. 3 (form 72)
- g. The form of accounting journal of prescription blanks - Appendix No. 4 (form 73)
- h. Form - threshold amounts of non-narcotic substances subject to special control registered in Georgia, drug forms of these substances, combined preparations containing them - Appendix No. 5 (form 74)

### **Suggestion**

- i) All the paper-based forms under prescription are handled by doctors. It has to be converted into an electronic form such that the number automatically gets updated in electronic prescription form

### **16. Laboratory services related forms**

- a. Laboratory application form (form 62)
- b. Application form for diagnostic investigation (form 63)
- c. Journal of laboratory tests - form No. IV-200-11/a (form 117)
- d. Application form for the laboratory (form 126)

### **Suggestions**

- i) As form 62 and form 63 have similar variables, it is advised to merge these forms to avoid duplications.

### **17. Radiation related forms**

- a. Patient dose registration form - Table (i) (form 134)
- b. Patient Dose Record Card - Table (ii) (form 135)
- c. Radiation protection means - Table (iii) (form 136)
- d. Efficiency of portable (mobile) protective devices - Table (iv) (form 137)
- e. Physical and technical parameters of the dental X-ray device - Table (v) (form 138)
- f. Minimum allowable distance between skin and focus (k.f.m.) - table (vii) (form 139)
- g. Type of examination - Table (viii) (form 140)
- h. Journal of control technical accounting (form 141)
- i. Records of personnel radiation doses (form 142)
- j. The exposure parameters are according to the investigation (form 143)

### **Suggestions**

- i) All the forms are paper based. Hence a single electronic portal with all the forms in the form of modules needs to be developed.
- ii) Form 134 and form 135 on patient dose registration and record can be merged as it has similar variables.

## **18. Workplace safety related forms**

- a. The report of the investigation of the accident in the workplace by the supervisory body (form 145)
- b. Risk assessment form (form 146)
- c. Registration form of industrial injuries and accidents (form 147)
- d. Labor protection and technical safety - SOP – 004 (form 177)
- e. Registration log of conducting instructions at the workplace (form 178)
- f. Journal of registration of workplace incidents - (F-SOP-004A-01) (form 179)
- g. Log of calibration of control and measuring devices - (F-SOP-006A-01) (form 181)
- h. Technical equipment service log - (F-SOP-005B-01) (form 182)

### **Suggestions**

- i) Since most of the variables are common between these forms, it is suggested to convert these forms as modules into a single electronic portal.

## **19. Screening of disease/risk factor related forms**

- a. Hepatitis C diagnosis reporting form (form 15)
- b. Hepatitis C monitoring form (form 16)
- c. Hepatitis C Screening Record-Monthly Reporting Form (form 19)
- d. N14 Diabetes management - specialist outpatient care (form 10)
- e. Cardiac Risk Factor Screening and Modification Sheet (form 58)
- f. Thyroid screening (form 22)
- g. form of measles (form 18)

### **Suggestions**

- i) Only cardiac risk assessment form is paper based. It can also be converted to electronic format and linked to electronic health record portal (form 48)
- ii) A single screening electronic portal can be developed with module for communicable and non-communicable diseases.

## **20. Miscellaneous forms**

- a. Journal of fire prevention instruction accounting (form 193)
- b. Metrological assurance - SOP-006 (form 205)
- c. Control and measuring equipment monitoring log - F-SOP-006A-01 (form 206)
- d. Journal of Fire Safety Instruction (form 208)
- e. N11 Medical assistance of the population (individual) during natural disasters, disasters, emergency situations, affected citizens in conflict regions and other cases determined by the Government of Georgia (special form) (form 7)
- f. Patient examination sheet - form No. IV-200-5/a (form 111)
- g. Medical documentation form No. IV-100/a (form 76)
- h. Documenting gender-based violence/sexual violence against women - form NoIV-200-5/b (form 75)
- i. Housekeeping administration module (form 42)
- j. City Hall - Psychiatric Crisis Brief Intervention for children (form 17)

### **Suggestions**

- i) Form 193 and form 208 related to fire safety are paper based. Some of the variables are similar, hence, to avoid duplication it can be merged and converted into single electronic format.
- ii) Form 75 (gender-based violence against women) and documentation of child abuse forms (form 129) are paper based forms. They can be converted into electronic formats and linked with electronic health records (form 48).
- iii) Form 17 is being collected only in city hall. It is recommended to collect the child psychiatric intervention information in rural hospitals also.

### **Objective 3. Estimate possible benefits in terms of saved time and paper or improved quality of data as a result of optimization of data recording through digitalization and interoperability**

To do this exercise, ideally, a time and motion study is needed. The time required to fill each paper format, excel data and electronic data should be recorded individually for analysis. The current dataset does not have such data to analyse the percentage of time saved, which is a limitation. With the available data, we can see that paper formats collect basic information of the beneficiary each time they visit followed by some registers, logs, journals and reports to filled based on the service obtained by the beneficiary. This process will take about 20 to 30 minutes to fill the basic information of the beneficiary (considering both inter and intra person variations) and another 5 to 10 minutes to register it on the paper format registries. In some instances, the electronic portals already in place also collect the same data as paper formats, so the person responsible for collection of variables should enter the variables that is already entered in paper format. It will take another 5 to 30 minutes depending on the number of variables. If the duplications are reduced as suggested in our results under Objective 2, the time for entering data can be reduced by almost half. The paper forms collect more data and interoperability is also difficult. So, there is a need for transition from paper forms to effectively integrated service specific electronic portals with the ability to interoperate data between the users and policy makers. This will save time in collecting, analysing and acting on the data and reduce the paper consumption.

### **Objective 4. Provide recommendations for improving data integration and interoperability**

The PHC system of Georgia collects data in many paper formats and slow electronic portals. The results of objectives 1 and 2 show how to reduce duplication and integrate data by service type, data system, and reporting level. The following recommendations can improve data integration and interoperability.

**First**, all beneficiaries should have a beneficiary ID/personal ID. If they don't, they should register during their first PHC visit/service (empanelment of beneficiaries). The registration should collect basic and insurance information and sync it to the National Public Registry Agency of Ministry of Justice. This will avoid collecting the same information repeatedly. Any changes in the beneficiary's details or registered doctor/institute should be updated using a common registration portal and shared between the institutes locally and centrally.

**Second**, the local hospital level should collect the information of the registering institute, the empanelled population, and the institute's details (such as rural doctor/nurse). These data should be linked to the beneficiary ID/personal ID.

**Third**, there should be separate portals for doctors, nurses, HR managers, and others. During an outpatient care visit, the nurse should enter the beneficiary ID/personal ID under a specific OPD services portal. This will automatically generate the basic details, target group details, service eligibility, and visit details. This can serve as a daily registration log and sync to the relevant data system. This will allow the policy managers to get real-time updates on daily/monthly/quarterly/yearly reports, such as the number of fever cases or hypertension cases (new/old) at the individual and population levels.

**Fourth**, the doctor should have a separate portal to record the services provided. For example, after registration with the nurse, the patient will be assessed by the doctor and the details of examination, laboratory tests, radiology findings will be recorded. Based on these findings, the doctor can diagnose the patient according to ICD 10. A possible improvement is to use Artificial Intelligence to generate the diagnosis based on the clinical and laboratory findings. The doctor can then add the prescription according to the diagnosis. This will help to monitor the patient's treatment. This data should be compatible with the nurse's data system to avoid recording the lab, prescription, and referral details again.

**Fifth**, the nurse is responsible for vaccination, so a common portal for vaccination will reduce paper use and help with dose calculation, visit registration, vaccination update, individual tracking, cold-chain system tracking, and inventory management. This needs minor changes (adding columns) and correctly linking the variables, which, entering correct and quality data, automatically perform correct calculations, planning, measurements of quality indicators etc.

**Sixth**, a separate portal to measure radiation exposure during diagnostic and interventional procedures can help to track the total radiation dose and take radiation safety measures.

**Seventh**, the patient can be identified and mapped digitally by the target group, which can help the policy makers to provide services to the specific groups.

**Eighth**, the birth and death data should be recorded at the polyclinic level using a common portal for vital events and shared with the National Statistical Survey Agency. The birth registration should give a birth certificate number that can be used for beneficiary registration. This will allow the policy managers to get an idea about the population at various levels (age groups, gender, target groups, etc). The birth and death related indicators, annual reports and Sustainable Development Goals indicators can be generated centrally.

**Ninth**, the financial flow can be generated at the PHC system level by recording the financial variables during each visit and service. For example, the capitation amount can be generated if the beneficiary ID is linked with insurance details and the money spent for each service is recorded. This should be synced to the insurance service providers and to the SARAS. This will help to reduce out-of-pocket expenditures, plan for effective strategies, and audit.

**Tenth**, the services provided by the vertical programs (TB/HIV/Maternal Health) should be compatible at the PHC system level so that all health activities at the individual beneficiary level can be monitored and tracked at the state and national level.

**Eleventh**, the human resource management can be done by integrating the institute level data from each PHC institute. This will be used to monitor the health work and performance of each health care provider and their unmet needs.

**Twelfth**, one of the main problems faced by the electronic portal users is low portal speed. Based on qualitative data analysis, a significant challenge faced by state portals is effective user management. Currently, institutions grant broad access to a single organizational-level

user account, which is shared among over 40 individuals, including state and municipal service providers. This shared access extends to a wide range of information, such as statistics, financial data, registration and removal processes, city hall programs (such as home care, thyroid, cervical/prostate cancer programs), state initiatives, and even sensitive data like mental health patient lists and diagnoses, as well as hepatitis C treatment records. This approach raises considerable concerns regarding data security and privacy protection. This may cause the data to not sync properly with the data management system. It is recommended to develop applications (for use in PC/mobile phone) that have an option for offline data entry and syncing once good internet is available. It is recommended to develop a strong electronic health ecosystem (Electronic Health Record System and Electronic Medical Record system) with good internet connectivity and interoperability between state agencies and ministries based on the results and recommendations. This will be a game changer in HIS of Georgia.

**Thirteen**, one of the important aspects of interoperability is to protect patient confidentiality and address data ownership issues. The eHealth applications and databases should follow an EHR standards developed in line with WHO's recommendations on EHR standards for developing countries (2006).(14) The standards should cover clinical informatics standards, data ownership, privacy and security aspects and the various coding systems. The use of standardized vocabulary such as SNOMED-CT should be mandatory. The data structures of the baseline data should be standardized.(15) To ensure the cyber security digital health care laws can be passed. Decree of Ministry of Health related to functioning EHR system (2019) in Georgia a step in the right direction.

**Finally**, to propose a new lean health data structure to support optimization of data collection requires further brainstorming with all the stakeholders of the Georgian healthcare system.

## 7. CONCLUSION

This report summarizes the HIS data from Georgia's PHC system. We found that Georgia's PHC system has problems with data integration, standardization, and use. The data collection and management involve many complicated and redundant systems and forms. We suggest digitising the forms and creating a common platform for data storage and access would reduce duplication and improve data quality and efficiency. We also recommend several specific measures to improve data integration and interoperability, such as: creating a beneficiary ID and registration system for all beneficiaries, which would collect basic demographic and health information and sync it to the National Public Registry Agency of Ministry of Justice. Collecting the data of the registering institute, the empanelled population, and the institute's details at the local hospital level and linking them to the beneficiary ID. Developing separate and common portals for different staff and services, such as vaccination, radiation safety, vital events, financial flow, vertical programs, electronic health ecosystem, and human resource management. These portals would allow data to be generated, updated, shared, and analysed more easily and effectively. They would also auto generate annual health reports and SDG indicators.

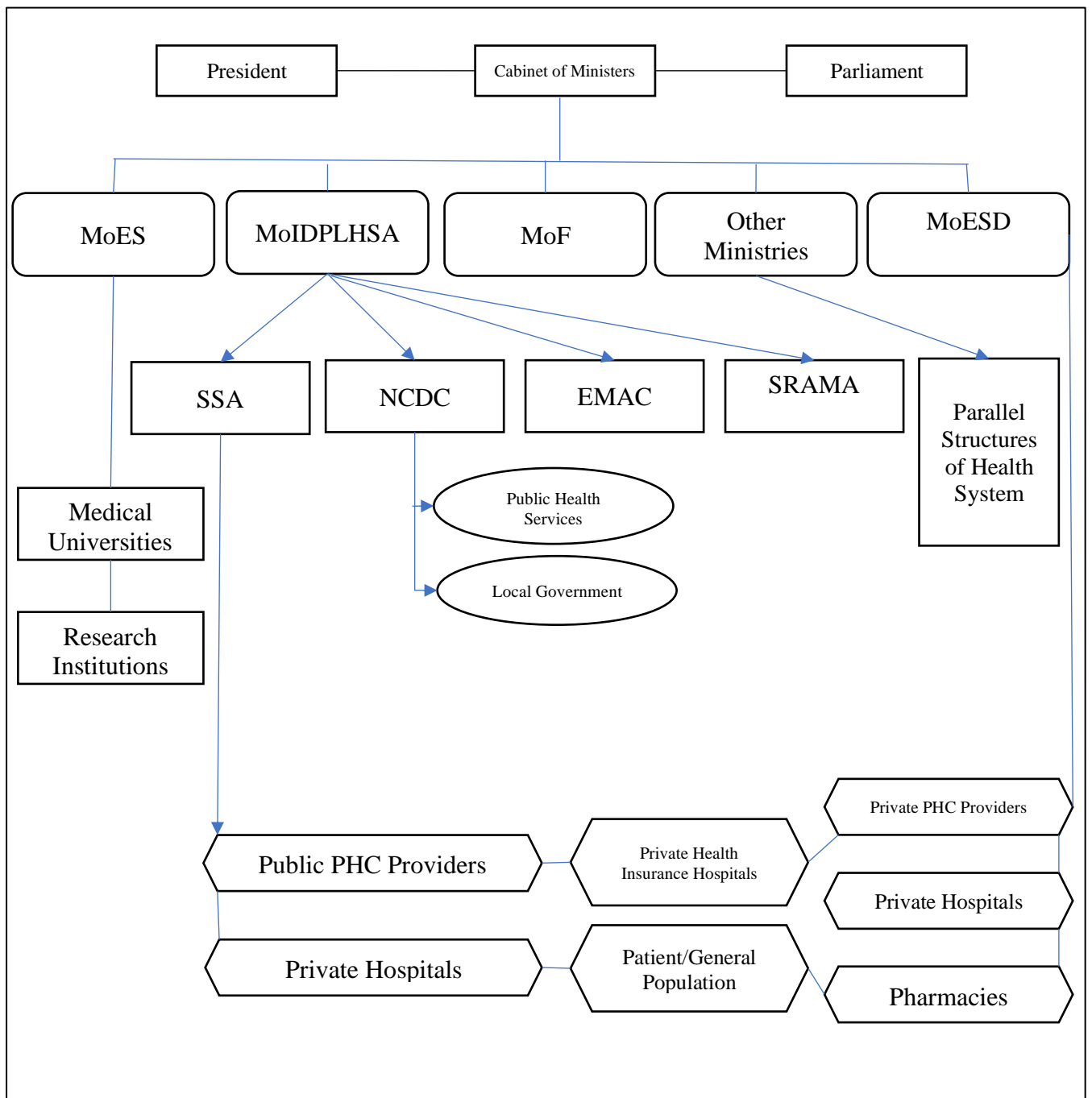


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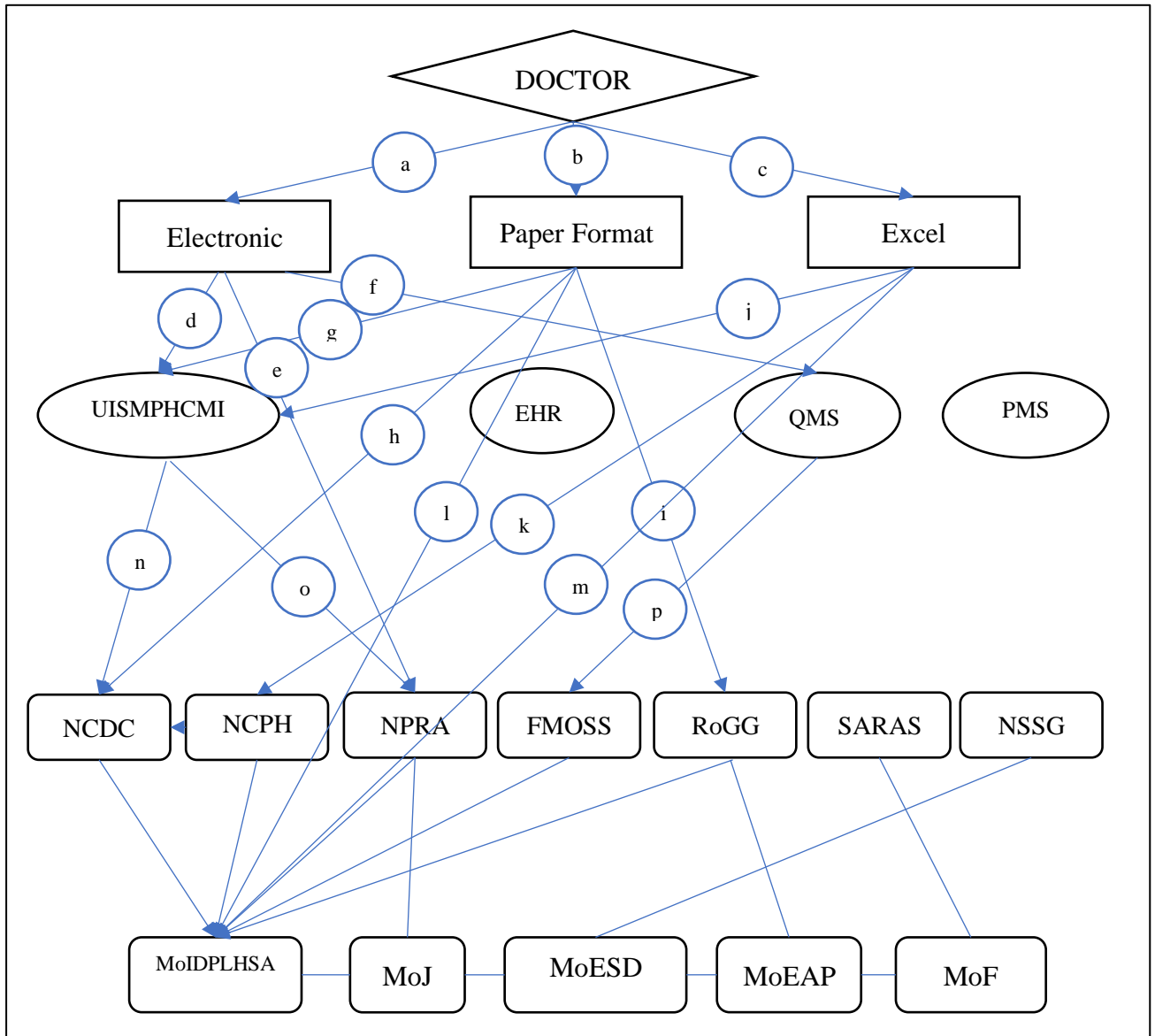
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## TABLE AND FIGURES

**Figure 1. Organisation of Health system in Georgia.**



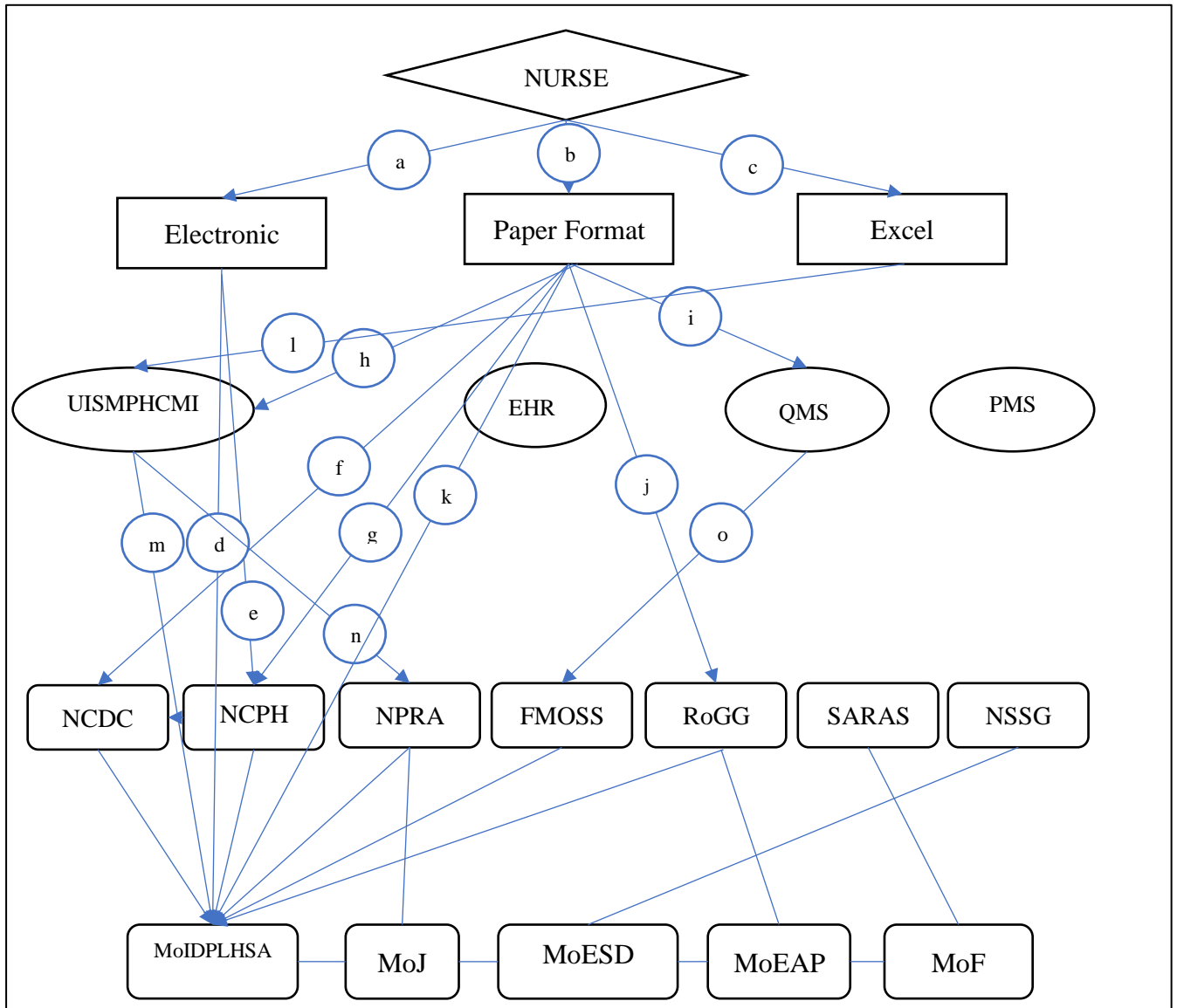
**Figure 2. The flow of data in the forms collected by the doctor in PHC system of Georgia.**



Forms in each data flow pathway (Form IDs)

- a- 45,48,51,53,132,187
- b- 57,58,60,62,63,71,72,73,74,75,76,78,89,105,106,107,110,111,112,113,114,115,116,120,123,124,126,128,129,144
- c- 52,59,61,130
- d- 48,51,53,132
- e- 45
- f- 187
- g- 57,58,76,105,106,107,109,110,111,112,113,114,115,116,120,123,124,126,128
- h- 60,62,63,72,73,74,78,89
- i- 144
- j- 59,130
- k- 61
- l- 75,29,71 (through special accounting journal)
- m- 52
- n- 132,51
- o- 48,53
- p- 187

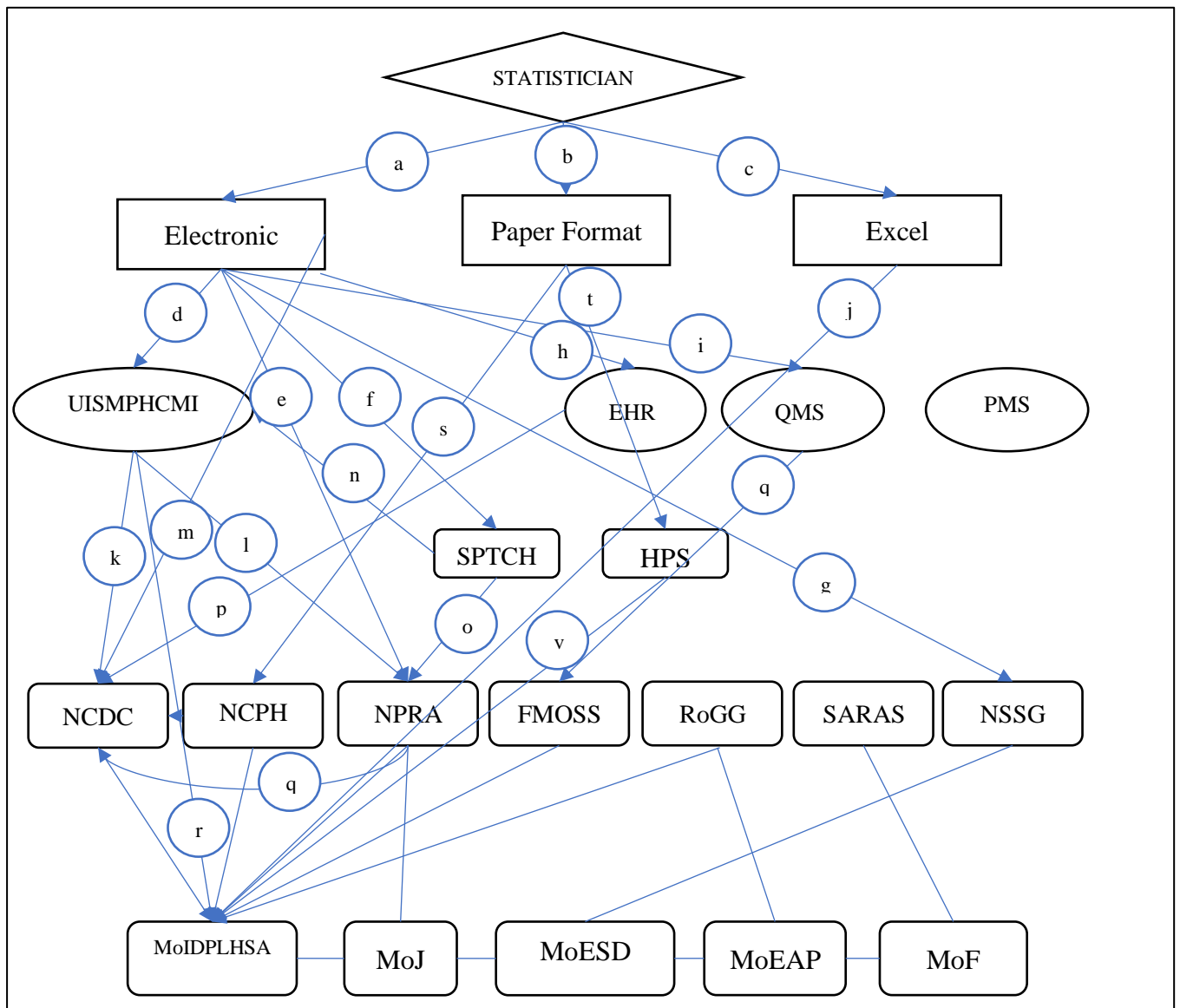
**Figure 3. The flow of data in the forms collected by the nurse in PHC system of Georgia.**



Forms in each data flow pathway (Form Ids)

- a. 93,94,95,96,97,98,99,100,101,102,103
- b. 79,80,81,82,83,84,85,86,88,92,117,121,122,131,134,135,136,137,138,139,140,141,142,143,145,170,171,172,173,174,175,176,181,182
- c. 125
- d. 98,100,101,102,103
- e. 93,94,95,96,97,99
- f. 92
- g. 79,80,81,82,83,84,85,86,88
- h. 117,121,122,131
- i. 170,171,172,173,174,175,176,181,182
- j. 134,135,136,137,138,139,140,141,142,143
- k. 145 (through investigation procedures and the manner of reporting)
- l. 125
- m. 131
- n. 117,121,122,125
- o. 170,171,172,173,174,175,176,181,182

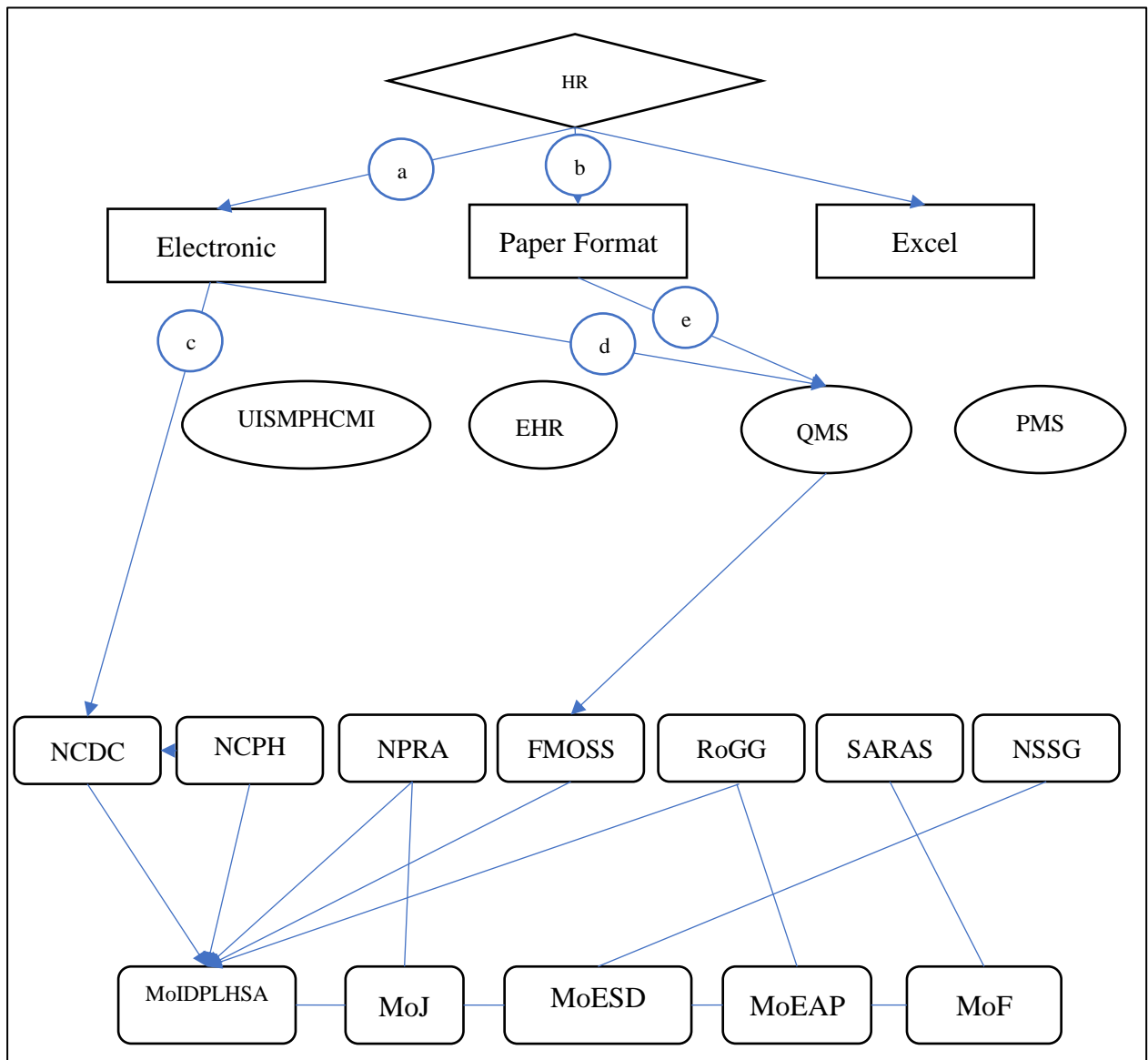
**Figure 4. The flow of data in the forms collected by the statistician in PHC system of Georgia.**



Forms in each data flow pathway (Form IDs)

- |    |  |    |                                      |
|----|--|----|--------------------------------------|
| a. | 5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,26,27,28,40,41,42,46,47,50,56,91,186,191 | k. | 40,46,47                             |
| b. | 64,65,66,67,68,69,70,77,87,90,41,42  | l. | 5,6,7,8,9,10,12,13,14,15,16,17,18,56 |
| c. | 104  | m. | 40,46,47                             |
| d. | 5,6,7,8,9,10,12,13,14,15,16,17,18,56   | n. | 42                                   |
| e. | 11,19,20,21,27,28  | o. | 22,23,26                             |
| f. | 22,23,26,42  | p. | 50                                   |
| g. | 91   | q. | 19,20,21,27,28                       |
| h. | 50   | r. | 42                                   |
| i. | 186,191  | s. | 64,65,66,67,68,70,77,87              |
| j. | 104  | t. | 69                                   |
|    |  | u. | 186,191                              |
|    |  | v. | 69                                   |

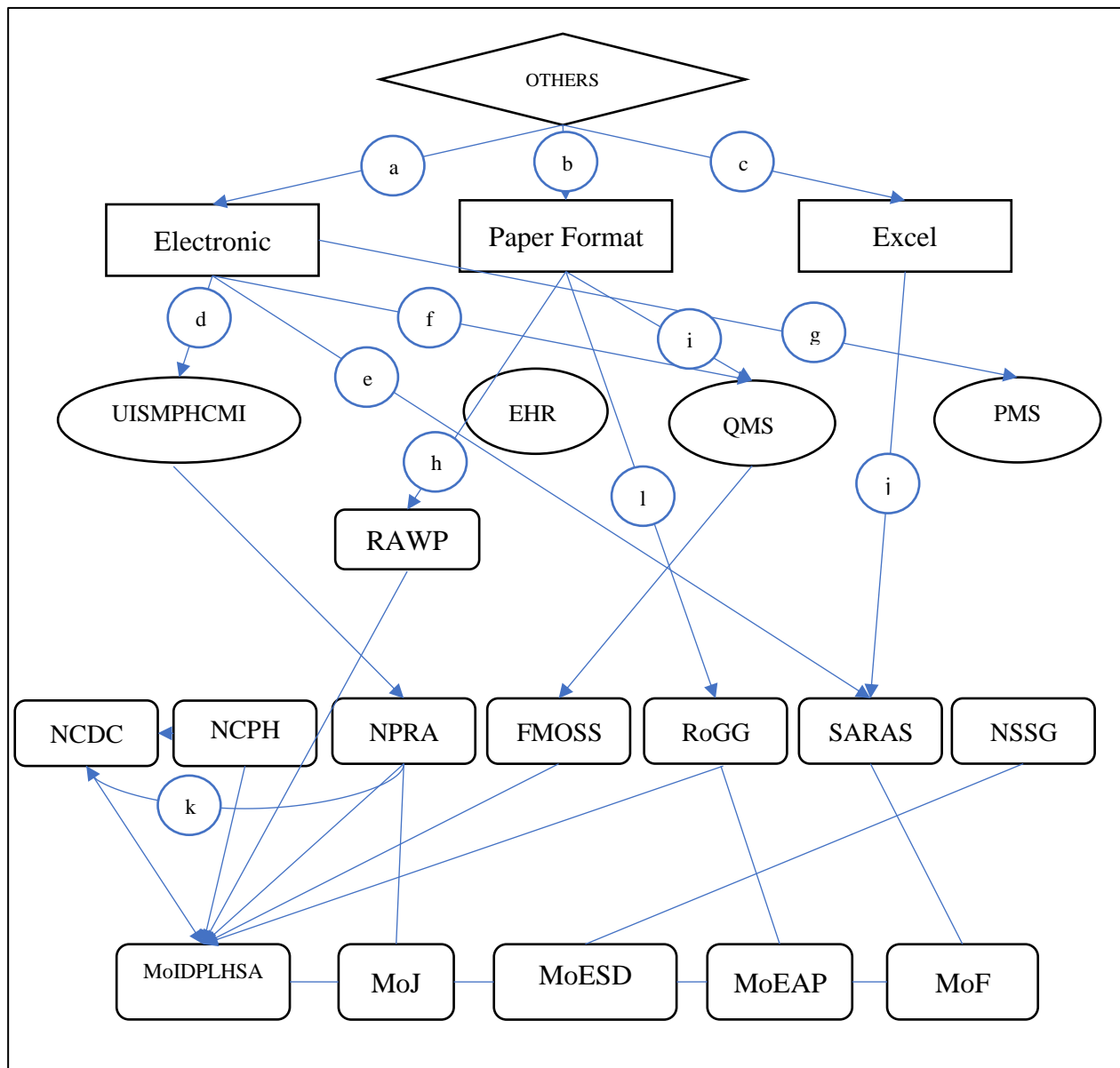
**Figure 5. The flow of data in the forms collected by the human resource manager in PHC system of Georgia.**



Forms in each data flow pathway (Form IDs)

- a. 49,194,195,199,203,204
- b. 196,197,198,200,201,202
- c. 49
- d. 194,195,199,203,204
- e. 196,197,198,200,201,202

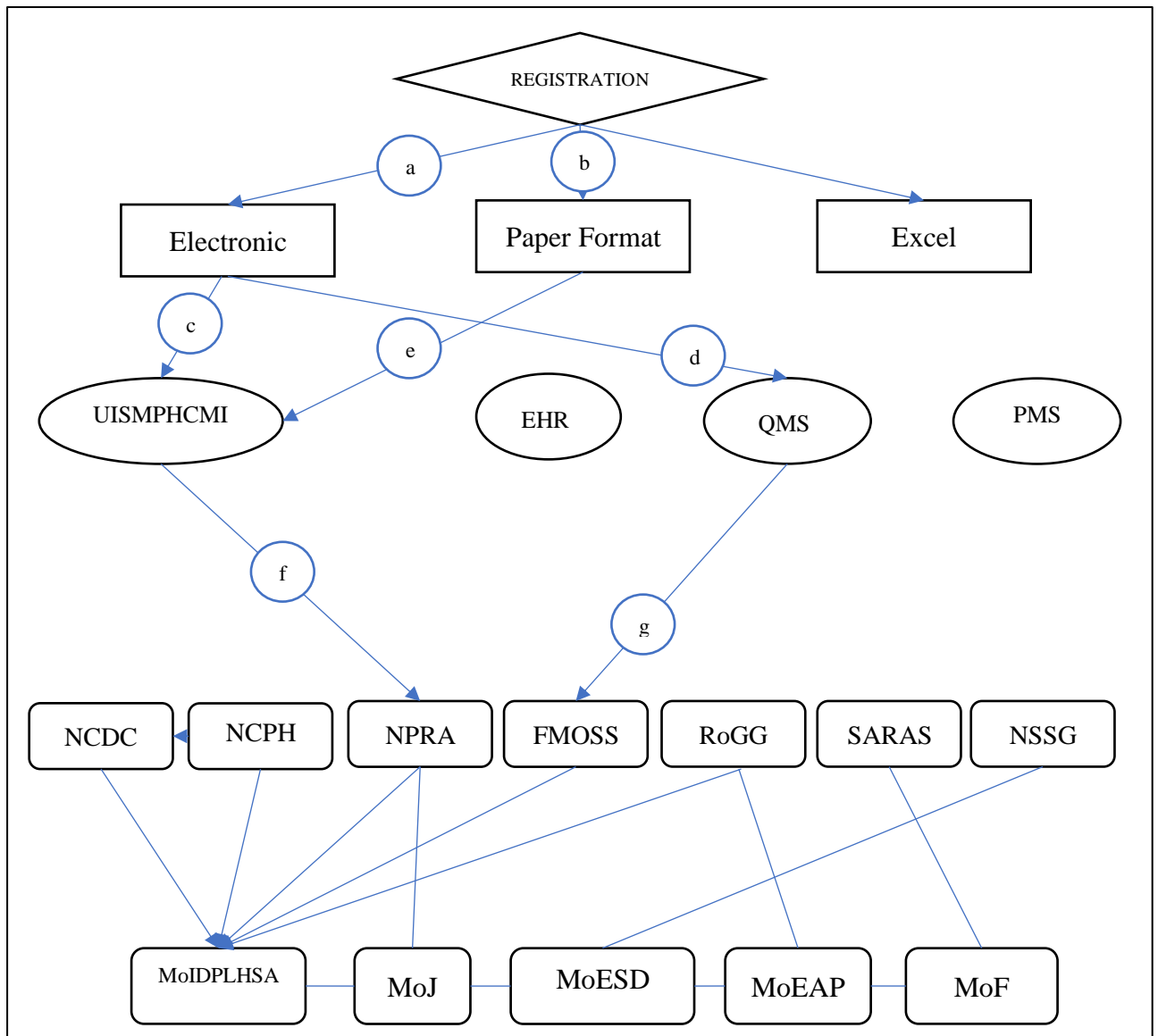
**Figure 6. The flow of data in the forms collected by others in PHC system of Georgia.**



Forms in each data flow pathway (Form IDs)

- a. 29,30,31,35,36,37,55,148, 149,150,153,154,155,156,157,158,159,160,161,162,163,164,165,166,167,183,188,189,190,205,206
- b. 146,147,177,178,179,193,208
- c. 32,39,
- d. 55,
- e. 32,39,
- f. 166,167,168,183,188,189
- g. 149
- h. 146
- i. 177,178,179,208
- j. 32,39
- k. 55,
- l. 147,193

**Figure 7. The flow of data in the forms collected during registration in PHC system of Georgia.**



Forms in each data flow pathway (Form IDs)

- a. 43,44,184,185
- b. 118,119
- c. 43,44
- d. 184,185
- e. 118,119
- f. 43,44,118,119
- g. 184,185



**Table 1. The details of the State Programs, including PHC component, beneficiaries and funding since 2017.**

		2017 - Present
Programs		<ol style="list-style-type: none"> <li>1. Universal Health Coverage Program,</li> <li>2. Rural Doctors Program,</li> <li>3. Separate State Programs for mental health, maternal and child health, immunization, diabetes, oncology, tuberculosis, HIV, screening</li> </ol>
Beneficiaries		Entire population except privately insured individuals, and individuals having income more than 40 000 lari per year
<p>Services (Since April 2017, services covered through the Universal Health Coverage Program have been differentiated for different population groups based on their income)</p>	<p>PHC component of Universal Health Coverage Program</p>	<ol style="list-style-type: none"> <li>1. Preventive services</li> <li>2. Outpatient visits</li> <li>3. Immunization</li> <li>4. Diagnostic services</li> <li>5. Laboratory investigations</li> <li>6. Chronic disease management</li> <li>7. Maternal and child health services</li> <li>8. Emergency care and ambulance</li> <li>9. Specialist consultations</li> <li>10. Endocrinologist</li> <li>11. Oncologist</li> <li>12. Gynaecologist</li> <li>13. TB doctor</li> <li>14. Ophthalmologist</li> <li>15. Otorhinolaryngology</li> <li>16. Psychiatrist</li> <li>17. Cardiologist</li> <li>18. Neurologist</li> </ol>

		19. Urologist
	Drugs	<ul style="list-style-type: none"> <li>• Drug supply for terminal oncology patients</li> <li>• DOTS for TB patients</li> </ul>
Financial sources		<ol style="list-style-type: none"> <li>1. Central budget</li> <li>2. Local municipal budgets for only maintenance of health facilities</li> <li>3. Out-of-pocket expenditure</li> </ol>
Payment mechanisms		Capitation US\$ 0.72 per capita Service fee for Rural Doctors Program
Depth of public subsidies		<ol style="list-style-type: none"> <li>1. PHC through Universal Health Coverage Program</li> <li>2. Fully covered outpatient care for poor</li> <li>3. Family doctor for all beneficiaries</li> <li>4. Specialist consultations subject to co-payment</li> <li>5. Drug benefits for chronic disease management for poor (fully covered from essential list from 2017)</li> </ol>
Program administration		Universal Health Coverage and Rural Doctors Programs: administered by Social Service Agencies

**Source:** Zoidze A, Rukhadze N, Chkhatarashvili K, Gotsadze G. PHC systems (PRIMASYS): comprehensive case study from Georgia. Geneva: World Health Organization; 2017. Available from: <https://apps.who.int/iris/handle/10665/34116>

**Table 2. List of forms used in the PHC System/Polyclinics of Georgia**

<b>ID form</b>	<b>Form Name</b>	<b>ID form</b>	<b>Form Name</b>	<b>ID form</b>	<b>Form Name</b>
5	Scheduled outpatient clinic - statistical form_1	20	Management of novel coronavirus disease COVID-19/Diagnosis form for COVID-19	40	N41 Covid-19 Vaccination Promotion Form
6	N14 Outpatient palliative care of incurable patients	21	Financial reporting of the Covid Laboratory system	41	Notification form - case.moh.gov.ge
7	N11 Medical assistance of the population (individual) during natural disasters, disasters, emergency situations, affected citizens in conflict regions and other cases determined by the Government of Georgia (special form)	22	Thyroid screening	42	Housekeeping administration module
8	N42-Remote management of confirmed cases of COVID-19 at the home	23	"Cervical Cancer Screening" - municipal oncoprevention program - Pap Test	43	Birth register - statistical form.
9	N41 Promotion of vaccination against Covid-19	26	"Management of prostate cancer" - municipal oncoprevention program - PSA	44	Beneficiary registration module
10	N14 Diabetes management - specialist outpatient care	27	"Cervical Cancer Screening" - Unified Cancer Information System...	45	Birth Death Module
11	Planned outpatient clinic - capitation_1	28	"Prostate Cancer Management" - Unified Cancer Information System	46	Form 25 - electronic system for registration of new cases of diseases in the institution providing ambulatory services
12	Planned ambulatory services (completed work)_1	29	General and administrative expense form	47	Form 25
13	City Hall - Home Care Annex N3 Register of Beneficiaries (For the socially vulnerable)	30	Income statement form	48	Electronic Health Records (EHR) System
14	N14 Antenatal care	31	Amalgamated Income Statement - Consolidated results of operations	49	eHealth users
15	Hepatitis C diagnosis reporting form	32	capital flow	50	Medical facility manager page
16	Hepatitis C monitoring form	35	Profit Loss Profitability Margin Form	51	Form No. 2 - psychotropic drugs - electronic prescription
17	City Hall - Psychiatric Crisis Brief Intervention for children	36	balance	52	Journal of Psychotropic Medication Registration
18	form of measles	37	cash flow	53	Electronic prescription system
19	Hepatitis C Screening Record-Monthly Reporting Form	39	Value added tax declaration form	55	Electronic prescription management system by the manager of the medical facility

ID form	Form Name	ID form	Form Name	ID form	Form Name
56	Annual Report - Form 01	71	Prescription blank form for prescription of narcotic drug (prescription blank yellow color) - attachment No. 1	86	Form 1.9. A table for calculating the need for amazing materials
57	Chronic disease surveillance form	72	Provisional rule for the appointment, prescription and purchase, storage, registration, issuance, write-off and destruction of special prescription forms for medicinal products subject to special control - Appendix No. 3	87	Monitoring schedule of rejection and contraindications (%) for DKT+ Bhep+hib+IPV
58	Cardiac Risk Factor Screening and Modification Sheet	73	The form of accounting journal of prescription blanks - Appendix No. 4	88	Vaccine Expenditure Indicator Form
59	Case register	74	Form - threshold amounts of non-narcotic substances subject to special control registered in Georgia, drug forms of these substances, combined preparations containing them - Appendix No. 5	89	Timeliness monitoring of Hexa3 to be conducted before the age of 5 months and 29 days
60	Rural Doctor State Program	75	Documenting gender-based violence/sexual violence against women - form NoIV-200-5/b	90	Children under 1 year of age with hexa 3 injections of blueberry indicatoris forma
61	The form of a Village nurse - the state program of a Village doctor	76	Medical documentation form No. IV-100/a	91	statistical form
62	Laboratory application form:	77	Form 1.1. Child registration log by year of birth	92	"Map of preventive vaccinations - form 063"
63	Application form for diagnostic investigation:	78	Form 1.2 Report on population age groups	93	Immunization system
64	Registration of an infectious disease in a medical institution (Journal No. 60/A)	79	Form 1.3 Vaccination plan for the next year	95	Received goods form
65	Registration of a disease/condition subject to urgent notification in the Supreme Court (Journal - No. 60/B)	80	Form 1.4 Journal of monthly planning and registration of vaccinations _____ (month)	96	Form of goods issued
66	Urgent notification card (form No. 58/1)	81	Form 1.5. More than 1 month, a log of permanent contraindications and rejections	97	Returned Goods Form
67	Aggregated/Monthly Notification of Certain Diseases/Conditions - Form 58/3	82	1.6 Record book of circulation of vaccines, solvents, syringes and disposal boxes	98	Form of goods returned to issuer
68	Weekly Standard Form of Influenza-like Illness/Severe Acute Respiratory Infection Cases	83	Form 1.7 Temperature registration in the refrigerator	99	Form of written off goods
69	Monthly mandatory notification form on the number of narcotic drugs prescribed by the polyclinic and dispensed by the pharmacy during the mutual comparison period - Appendix No. 3	84	Form 1.8.	100	Expired goods form
70	Quarterly, mandatory reporting form of the Drug Control Inspection on the number of narcotic drugs issued for oncocurable and somatic patients and their needs - Appendix No. 4	85	Report on preventive vaccinations carried out - form IV-04 (1.8)	101	balance form

<b>ID form</b>	<b>Form Name</b>	<b>ID form</b>	<b>Form Name</b>	<b>ID form</b>	<b>Form Name</b>
102	with the balance period	118	Outpatient patient registration journal - form No. IV-200-12/a	135	Patient Dose Record Card - Table (i)
103	Inventory form	119	Registration log of outpatient visits and calls to the home/place - form No. IV-200-13/a	136	Radiation protection means - Table (iii)
104	Form No. 39	120	Hospital sheet accounting registration journal	137	Efficiency of portable (mobile) protective devices - Table (iv)
105	Form No. IV-200/a Name of the person/institution providing outpatient services	121	Receipt of s/sheets and balances - warehouse	138	Physical and technical parameters of the dental X-ray device - Table (v)
106	Immunization table - Form No. IV-200-1/a - Appendix No. 2	122	Receipt of s/sheets and balances - issuance	139	Minimum allowable distance between skin and focus (k.f.m.) - table (vii)
107	Table of general data - form No. IV-200-2/a	123	Hospital sheet accounting registration journal	140	Type of examination - Table (viii)
109	Table of final diagnoses - form No. IV-200-3/a	124	Referral card	141	Journal of control technical accounting
110	For providers of PHC services - form No. IV-200-4/a	125	X-ray referral registration log	142	Records of personnel radiation doses
111	Patient examination sheet - form No. IV-200-5/a	126	Application form for the laboratory	143	The exposure parameters are according to the investigation
112	Results of clinical-diagnostic examination - form No. IV-200-6/a	128	Beneficiary's consent to registration in a medical institution for receiving outpatient services within the framework of the state program of universal health protection	144	Capacity of polyclinics and outpatient clinics
113	Protocol of medical intervention No. - Form No. IV-200-7/a	129	Documentation of child abuse/sexual abuse - form No. IV-200-5/g	145	The report of the investigation of the accident in the workplace by the supervisory body
114	Written informed consent of the patient for the provision of medical services - form No. IV-200-8/a	130	Table (i). Basic preventive services for children aged 0-6 years	146	Risk assessment form
115	Ante/perinatal anamnesis - form No. IV-200-9/a	131	Management Plan - (Diagnostic Services/Treatment - Drug/Non-drug)	147	Registration form of industrial injuries and accidents
116	Planned surveillance form - form No. IV-200-10/a	132	Work time registration form -	148	Stakeholders and their expectations - F-MI-01C-01
117	Journal of laboratory tests - form No. IV-200-11/a	134	Patient dose registration form - Table (i)	149	Objectives - Strategic Event Planning Form - F-MI-01A-01

<b>ID form</b>	<b>Form Name</b>	<b>ID form</b>	<b>Form Name</b>	<b>ID form</b>	<b>Form Name</b>
150	Assessment of positive and negative factors of the organization (SWOT analysis) - F-MI-01B-01	167	Advertising magazine - F-MI - 05C - 01	184	Patient internal fixation log
153	Process reporting form - F-MI-01D-01	168	Application form - F-MI 05B - 01	185	Patient withdrawal/reattachment log
154	Documentation review journal - F- MI- 02D-01	170	Equipment disinfection work registration log - (F – SOP – 008C 01)	186	empanelled population Movement
155	Journal of registration of changes - F- MI – 02E-01	171	Registration log of dry, hot air sterilization in the cabinet - (F – SOP – 008D 01)	187	Register of non-communicable diseases
156	Internal Documented Information List - F-MI-02B-01	172	Registration log of autoclave dry steam sterilization works - (F – SOP – 008E 01)	188	Application for purchase - F-PD-02A-01
157	List of documented information - F-MI-02C-01	173	Disinfectant outcome preparation registration log - (F – SOP – 008F 01)	189	Initial Vendor Evaluation - F-PD-02B-01
158	List of external documented information - F-MI-02A-01	174	Journal of registration of chemical (cold) sterilization works - (F – SOP – 008G 01)	190	Current Vendor Evaluation - F-PD-02D-01
159	Internal audit plan - MI 03	175	Journal of registration of disinfection works - (F – SOP – 008 A 01)	191	The work done by the doctor
160	Internal audit registration log - 1 F-MI 03-A-01	176	Pre-sterilization processing/sampling registration log - F-SOP-008I-01	193	Journal of fire prevention instruction accounting
161	Program for conducting internal audits	177	Labor protection and technical safety - SOP - 004	194	Human resources management - PD – 01
162	Internal Audit Plan - F-MI-03B-01	178	Registration log of conducting instructions at the workplace -	195	Application for staffing needs
163	Internal Audit Report - F-MI-03C-01	179	Journal of registration of workplace incidents - (F-SOP-004A-01)	196	Job Seeker Evaluation Form
164	Correction and Corrective Action Plan - F-MI-04A-01	181	Log of calibration of control and measuring devices - (F-SOP-006A-01)	197	Final Evaluation Form - F-PD-01C-01
165	Journal of non-compliance registration - F-MI - 05D - 01	182	Technical equipment service log - (F-SOP-005B-01)	198	Introductory Instruction Registration Log - F-PD-01D-01
166	Nonconformance Management - F-MI 05A - 01	183	Journal of registration of telephograms	199	On-the-job training registration log - F-PD-01E-01

<b>ID form</b>	<b>Form Name</b>
200	Probationary evaluation form - F-PD-01F-01
201	Application for employee training
202	Personnel Evaluation Form - F-PD-01H-01
203	Journal of registration of personnel training
204	Personnel HR database
205	Metrological assurance - SOP-006
206	Control and measuring equipment monitoring log - F-SOP-006A-01
208	Journal of Fire Safety Instruction

**Table 3. Overview of forms used in polyclinics of Georgia.**

		Number of forms	%	Form Ids
<b>Format of form</b>	Electronic	91	48.4	5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23, 26,27,28,29,30,31,35,36,37,40,41,42,43,44,45,46,47,48,49,50,51,53,55,56,91,93,94,95,96,97,98,99, 100,101,102,103,132,148,149,150,153,154,156,157,158,159,160,161,162,163,164,165,166,167,168 ,183,184,185,186,187,188,189,190,191,194,195,199,203,204,205,206
	Paper- Format	89	47.3	57,58,60,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90, 92,105,106,107,109,110,111,112,113,114,115,116,117,118,119,120,121,122,123,124,126,128,129, 131,132,133,134,135,136,137,138,139,140,141,142,143,144,145,146,147,170,171,172,173,174,175 ,176,177,178,179,180,181,182,193,196,197,198,200,201,202,208,
	Excel	8	4.3	32,39,52,59,61,104,125,130
	Total	188		
<b>Collection of data</b>	Individual data	60	31.9	29,41,42,43,44,45,48,49,50,51,53,93,57,58,60,62,63,64,66,71,72,74,75,76,80,92,106,107,110,111,1 12,113,114,115,116,120,124,126,128,131,135,136,138,140,142,145,166,196,200,201,202,168,188,1 89,190,195,204,59,61,130,
	Aggregated	128	68.1	5,6,7,8,9,10,11,12,13,14,15,16,,1,7,18,19,20,21,22,23,26,27,28,30,31,32,39,52,104,125,35,36,37,40,4 6,47,55,56,91,94,95,96,97,99,98,100,101,102,103,132,148,149,150,153,154,155,156,157,158,159,1 60,161,162,163,164,165,166,167,65,67,68,69,70,73,77,78,79,81,82,83,84,85,86,88,89,90,105,109,1 17,118,119,121,122,123,129,134,137,139,141,143,144,146,147,170,171,172,173,174,175,176,177, 179,181,182,183,184,185,186,187,191,194,199,203,205,206,193,197,198,208,
	Total	188		
<b>Type of form</b>	Data collection from primary source	82	43.6	5,6,7,11,12,13,14,15,16,17,18,19,20,21,22,29,40,41,42,43,44,45,49,51,52,53,57,58,62,63,66,71,72, 74,76,75,80,84,85,86,92,107, 109, 110,111,112,113,114,115,116,120,124,126,128,129,130,131,132,135,136,137,138,139,140,142,143 ,144,145,150,155,156,164,166,168,188,190,195,196,197,200,201,202



	Reporting	106	56.4	8,9,10,23,26,27,28,30,31,32,35,36,37,39,46,47,48,50,55,56,59,60,61,64,67,65,68,69,70,73, 77,78,79, 81,82,83,88,87,89,90,91,93,94,95,96,97,98,99,100,101,102,103,104,105,106, 117,118,119,121,122, 123,125,134,141,146,147,148,149,153,154,157,158,159,160,161,162,163,165,167,170,171,172,173 ,174,175,176,177,178,179,181,182,183,184,185,186,187,189,191,193,194,198,199,203,204,205,20 6,208
	Total	188	0	
<b>Who is the main responsible staff to fill out the form</b>	Doctor	40	21.3	45,48,51,52,53,57,58, 59,60,61,62,62,63,7172,73,74,75,76,77,78,89,105,106,107,109,110,111,112, 113,114,115,116,120,123,124,126,128,129,130132,144,187
	Nurse	46	24.5	79,80,81,82,83,84,85,86,87,88,92,93,95, 96,97,98,99,100,101,102,103,117,121,122,125,131,134,13 5,136,137,138,139,140,141,142,143,145,170,171,172,173,174,175,176,181,182
	Statistician	43	22.9	5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,26, 27,28,40,41,42,46,47,50,56,64,65,66,67,68 ,69,70,77,87,91,104,186,191
	HR	12	6.4	49,194,195,196,197,198,199,200,201,202,203,204
	Registration	6	3.2	43,44,118,119,184,185
	Others	41	21.8	29,30,31,3235,36,37,39,55,146,147,148,149,150,153,154,155,156,157,158,159,160,161,162,163,16 4,165,166,167,168, 177,178,179,183,188,189,190,193,205,206,208
	Total	188		
<b>Type of source data</b>	Primary	54	28.7	19,20,22,23,26,27,28,40,43,44,45,48,49,51,53,57,58,59,60,61,62,63,65,66,71,72,75,78,110, 111,11 3,114,115,119,121,128,129,130,131,132,134,135,136,137,138,142,144,145,148,149,150,153,197,2 00,
	Secondary	134	71.3	5,6,7,8,9,10,11,12,,13,14,15,16,17,29,30,31,32,18,21, 35,36,37,39,41,42,46,47,50,52,55,56,64,67,6 8,69,70,73,74,76,77,79,80,81,82,83,84,85,86,87,89,91,92,93,95,96,97,98,99,100,101,102,103,104,1 05,106,107,109,112,116,117,118,120,122,123,124,125,126,139,140,141,143,146,147,154,155,156, 157,158,159,160,161,162,163,164,165,166,167,168,170,171,172,173,174,175,176,177,178,182,183 ,184,185,186,187188,190,190,191,193,179,181,194,195,196,198199,201,201,203,202,204,205,206, 208
	Total	188		

**Table 4. Data flow of various forms in PHC services reporting to National Centre for Disease Control and Public Health**

State Agency	National Centre for Disease Control and Public Health	
Data System	Electronic Health Records System	Unified Information System of Management of PHC Medical Institution.
Forms in PHC services	<ul style="list-style-type: none"> <li>I. Medical facility manager page (Form Id 50)</li> </ul>	<ul style="list-style-type: none"> <li>II. Psychotropic drugs Regulation</li> <li>III. Inventory/Accounts Management</li> <li>IV. Outpatient services</li> <li>V. Child Immunization Service</li> <li>VI. Notifications/Reports</li> <li>VII. Chronic disease Screening &amp; surveillance</li> <li>VIII. Registers</li> <li>IX. COVID-19 vaccine promotion</li> <li>X. Human Resource Management</li> </ul>

**Table 5. Details of the forms collected by Unified Information System of Management of PHC Medical Institution reported to National Centre for Disease Control and Public Health, Georgia**

I. Psychotropic drugs Regulation
<ol style="list-style-type: none"> <li>1. Journal of Psychotropic Medication Registration</li> <li>2. Provisional rule for the appointment, prescription and purchase, storage, registration, issuance, write-off and destruction of special prescription forms for medicinal products subject to special control - Appendix No. 3</li> <li>3. The form of accounting journal of prescription blanks - Appendix No. 4</li> <li>4. Form - threshold amounts of non-narcotic substances subject to special control registered in Georgia, drug forms of these substances, combined preparations containing them - Appendix No. 5</li> <li>5. Form No. 2 - psychotropic drugs - electronic prescription</li> </ol>
II. Inventory/Accounts Management
<ol style="list-style-type: none"> <li>1. Form of goods returned to issuer</li> <li>2. Expired goods form</li> <li>3. balance form</li> <li>4. with the balance period</li> <li>5. Inventory form</li> </ol>
III. Outpatient services
<ol style="list-style-type: none"> <li>1. Form 25 - electronic system for registration of new cases of diseases in the institution providing ambulatory services</li> <li>2. Laboratory application form</li> <li>3. Application form for diagnostic investigation</li> <li>4. Management Plan - (Diagnostic Services/Treatment - Drug/Non-drug)</li> <li>5. "Map of preventive vaccinations - form 063"</li> <li>6. Table (i). Basic preventive services for children aged 0-6 years</li> </ol>
IV. Child Immunization Service
<ol style="list-style-type: none"> <li>1. Immunization system</li> <li>2. Form of goods received</li> <li>3. Received goods form</li> <li>4. Form of goods issued</li> </ol>

5. Returned Goods Form
6. Form of written off goods
7. Form 1.1. Child registration log by year of birth
8. Form 1.2 Report on population age groups
9. Form 1.3 Vaccination plan for the next year
10. Form 1.4 Journal of monthly planning and registration of vaccinations \_\_\_\_\_ (month)
11. Form 1.5. More than 1 month, a log of permanent contraindications and rejections
12. 1.6 Record book of circulation of vaccines, solvents, syringes and disposal boxes
13. Form 1.7 Temperature registration in the refrigerator
14. Form 1.8. Report on preventive vaccinations carried out - form IV-04
15. Form 1.9. A table for calculating the need for amazing materials
16. Monitoring schedule of rejection and contraindications (%) for DKT+ Bhep+hib+IPV
17. Vaccine Expenditure Indicator Form
18. Children under 1 year of age with hexa 3 injections of blueberry indicators form

#### V. Notifications/Reports

1. Urgent notification card (form No. 58/1)
2. Aggregated/Monthly Notification of Certain Diseases/Conditions - Form 58/3
3. Weekly Standard Form of Influenza-like Illness/Severe Acute Respiratory Infection Cases
4. Monthly mandatory notification form on the number of narcotic drugs prescribed by the polyclinic and dispensed by the pharmacy during the mutual comparison period - Appendix No. 3
5. Quarterly, mandatory reporting form of the Drug Control Inspection on the number of narcotic drugs issued for oncocurable and somatic patients and their needs - Appendix No. 4
6. Notification form - case.moh.gov.ge
7. Documenting gender-based violence/sexual violence against women - form NoIV-200-5/b
8. Documentation of child abuse/sexual abuse - form No. IV-200-5/g

#### VI. Chronic disease Screening & surveillance

1. Chronic disease surveillance form
2. Cardiac Risk Factor Screening and Modification Sheet

#### VII. Registries

1. Case register

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| <ol style="list-style-type: none"><li>2. Registration of an infectious disease in a medical institution (Journal No. 60/A)</li><li>3. Registration of a disease/condition subject to urgent notification in the Supreme Court (Journal - No. 60/B)</li></ol> |
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VIII. COVID -19 Vaccine promotion
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| <ol style="list-style-type: none"><li>1. N41 Covid-19 Vaccination Promotion Form</li></ol> |
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IX. Human Resource Management
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| <ol style="list-style-type: none"><li>1. Work time registration form</li><li>2. eHealth users</li><li>3. Rural Doctor State Program</li><li>4. The form of a Village nurse - the state program of a Village doctor</li></ol> |
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**Table 6. Data flow of various forms in PHC services under National Public Registry Agency of the Ministry of Justice of Georgia**

State Agency	National Public Registry Agency of the Ministry of Justice of Georgia	
Data System	Unified Information System of Management of PHC Medical Institution.	Social Protection Programs of Tbilisi City Hall
Forms in PHC services	<ul style="list-style-type: none"> <li>I. Vital events Registration</li> <li>II. Hepatitis C monitoring</li> <li>III. COVID-19</li> <li>IV. Cancer screening/management</li> <li>V. Outpatient services</li> <li>VI. Outpatient registers</li> <li>VII. Outpatient Service Financial Management</li> <li>VIII. Outpatient Service Human Resource Management</li> <li>IX. Maternal Health</li> <li>X. Reports</li> <li>XI. City Hall registers</li> </ul>	<ul style="list-style-type: none"> <li>I. Screening of diseases: <ul style="list-style-type: none"> <li>1. Thyroid screening</li> </ul> </li> <li>II. Cancer screening/management: <ul style="list-style-type: none"> <li>1. "Cervical Cancer Screening" - municipal oncoprevention program - Pap Test</li> <li>2. "Management of prostate cancer" - municipal oncoprevention program – PSA</li> </ul> </li> <li>III. Outpatient Service Human Resource Management <ul style="list-style-type: none"> <li>1. Housekeeping administration module</li> </ul> </li> </ul>

**Table 7. Details of the forms collected by Unified Information System of Management of PHC Medical Institution reported to National Public Registry Agency of the Ministry of Justice of Georgia**

<b>I. Vital events Registration</b>
<ol style="list-style-type: none"> <li>1. Birth Death Module</li> <li>2. Birth register - statistical form.</li> </ol>
<b>II. Hep C monitoring</b>
<ol style="list-style-type: none"> <li>1. Hepatitis C Screening Record-Monthly Reporting Form</li> <li>2. Hepatitis C diagnosis reporting form</li> <li>3. Hepatitis C monitoring form</li> </ol>
<b>III. COVID-19</b>
<ol style="list-style-type: none"> <li>1. Management of novel coronavirus disease COVID-19/Diagnosis form for COVID-19</li> <li>2. Financial reporting of the Covid Laboratory system</li> <li>3. N42-Remote management of confirmed cases of COVID-19 at the home</li> <li>4. N41 Promotion of vaccination against Covid-19</li> </ol>
<b>IV. Cancer screening/management</b>
<ol style="list-style-type: none"> <li>1. "Cervical Cancer Screening" - Unified Cancer Information System</li> <li>2. "Prostate Cancer Management" - Unified Cancer Information System</li> </ol>
<b>V. Out patient services</b>
<ol style="list-style-type: none"> <li>1. Electronic Health Records (EHR) System</li> <li>2. Beneficiary registration module</li> <li>3. Scheduled outpatient clinic - statistical form_1</li> <li>4. N14 Outpatient palliative care of incurable patients</li> <li>5. N11 Medical assistance of the population (individual) during natural disasters, disasters, emergency situations, affected citizens in conflict regions and other cases determined by the Government of Georgia (special form)</li> <li>6. N14 Diabetes management - specialist outpatient care</li> <li>7. Planned ambulatory services (completed work)_1</li> <li>8. form of measles</li> <li>9. Immunization table - Form No. IV-200-1/a - Appendix No. 2</li> <li>10. Table of general data - form No. IV-200-2/a</li> <li>11. Table of final diagnoses - form No. IV-200-3/a</li> </ol>

12. For providers of PHC services - form No. IV-200-4/a
13. Patient examination sheet - form No. IV-200-5/a
14. Results of clinical-diagnostic examination - form No. IV-200-6/a
15. Protocol of medical intervention No. - Form No. IV-200-7/a
16. Beneficiary's consent to registration in a medical institution for receiving outpatient services within the framework of the state program of universal health protection
17. Written informed consent of the patient for the provision of medical services - form No. IV-200-8/a
18. Application form for the laboratory
19. Journal of laboratory tests - form No. IV-200-11/a
20. Outpatient patient registration journal - form No. IV-200-12/a
21. Registration log of outpatient visits and calls to the home/place - form No. IV-200-13/a
22. Referral card
23. X-ray referral registration log
24. Electronic prescription system
25. Electronic prescription management system by the manager of the medical facility

#### VI. Out patient Service Financial Management

1. Planned outpatient clinic - capitation\_1
2. Hospital sheet accounting registration journal
3. Receipt of s/sheets and balances – warehouse
4. Receipt of s/sheets and balances - issuance

#### VII. HR Management

1. Form No. IV-200/a Name of the person/institution providing outpatient services

#### VIII. Maternal Health

1. N14 Antenatal care
2. Ante/perinatal anamnesis - form No. IV-200-9/a

#### IX. Report

1. Annual Report - Form 01

#### X. City Hall registers

1. City Hall - Home Care Annex N3 Register of Beneficiaries (For the socially vulnerable)
2. City Hall - Psychiatric Crisis Brief Intervention for children



**Table 8. Data flow of various services under Family medicine office service standards, Georgia**

State Agency	Family medicine office service standards	
Data System	Patient management system	Quality management system
Forms in PHC services	1. Objectives - Strategic Event Planning Form - F-MI-01A-01	I. Disinfection quality management II. Workplace Safety quality management III. Vendor quality Management IV. Patient movement management V. Human resource Quality Management VI. Institute Quality Management VII. NCD register

**Table 9. Details of the forms collected by Quality management system under the Family medicine office service standards, Georgia**

I. Disinfection quality management
<ol style="list-style-type: none"> <li>1. Equipment disinfection work registration log - (F – SOP – 008C 01)</li> <li>2. Registration log of dry, hot air sterilization in the cabinet - (F – SOP – 008D 01)</li> <li>3. Registration log of autoclave dry steam sterilization works - (F – SOP – 008E 01)</li> <li>4. Disinfectant outcome preparation registration log - (F – SOP – 008F 01)</li> <li>5. Journal of registration of chemical (cold) sterilization works - (F – SOP – 008G 01)</li> <li>6. Journal of registration of disinfection works - (F – SOP – 008 A 01)</li> <li>7. Pre-sterilization processing/sampling registration log - F-SOP-008I-01</li> </ol>
II. Workplace Safety quality management
<ol style="list-style-type: none"> <li>1. Labor protection and technical safety - SOP – 004</li> <li>2. Registration log of conducting instructions at the workplace –</li> <li>3. Journal of registration of workplace incidents - (F-SOP-004A-01)</li> <li>4. Log of calibration of control and measuring devices - (F-SOP-006A-01)</li> <li>5. Technical equipment service log - (F-SOP-005B-01)</li> <li>6. Metrological assurance - SOP-006</li> <li>7. Control and measuring equipment monitoring log - F-SOP-006A-01</li> <li>8. Journal of Fire Safety Instruction</li> </ol>
III. Vendor quality Management
<ol style="list-style-type: none"> <li>1. Application for purchase - F-PD-02A-01</li> <li>2. Initial Vendor Evaluation - F-PD-02B-01</li> <li>3. Current Vendor Evaluation - F-PD-02D-01</li> </ol>
IV. Patient movement management
<ol style="list-style-type: none"> <li>1. Patient internal fixation log</li> <li>2. Patient withdrawal/reattachment log</li> <li>3. empanelled population Movement</li> </ol>
V. Human Resource Quality Management
<ol style="list-style-type: none"> <li>1. Human resources management - PD – 01</li> <li>2. Application for staffing needs</li> <li>3. Job Seeker Evaluation Form</li> </ol>

4. Final Evaluation Form - F-PD-01C-01
5. Introductory Instruction Registration Log - F-PD-01D-01
6. Probationary evaluation form - F-PD-01F-01
7. Application for employee training
8. Personnel Evaluation Form - F-PD-01H-01
9. Journal of registration of personnel training
10. Personnel HR database
11. Journal of registration of telehonegrams
12. The work done by the doctor

#### VI. Institute Quality Management

1. Advertising magazine - F-MI - 05C – 01
2. Application form - F-MI 05B – 01
3. Stakeholders and their expectations - F-MI-01C-01
4. Assessment of positive and negative factors of the organization (SWOT analysis) - F-MI-01B-01
5. Process reporting form - F-MI-01D-01
6. Documentation review journal - F- MI- 02D-01
7. Journal of registration of changes - F- MI – 02E-01
8. Internal Documented Information List - F-MI-02B-01
9. List of documented information - F-MI-02C-01
10. List of external documented information - F-MI-02A-01
11. Internal audit plan - MI 03
12. Internal audit registration log - 1 F-MI 03-A-01
13. Program for conducting internal audits
14. Internal Audit Plan - F-MI-03B-01
15. Internal Audit Report - F-MI-03C-01
16. Correction and Corrective Action Plan - F-MI-04A-01
17. Journal of non-compliance registration - F-MI - 05D – 01
18. Nonconformance Management - F-MI 05A - 01

#### VII. NCD register

1. Register of non-communicable diseases

**Table 10. Data flow of various services under Resolution of the Government of Georgia No. 317.**

State Agency	Resolution of the Government of Georgia No. 317	
Data System	Radiation Safety Requirements in the Sphere of Medical Irradiation	Risk assessment in the workplace
Forms in PHC services	<ol style="list-style-type: none"> <li>1. Patient dose registration form - Table (i)</li> <li>2. Patient Dose Record Card - Table (ii)</li> <li>3. Radiation protection means - Table (iii)</li> <li>4. Efficiency of portable (mobile) protective devices - Table (iv)</li> <li>5. Physical and technical parameters of the dental X-ray device - Table (v)</li> <li>6. Minimum allowable distance between skin and focus (k.f.m.) - table (vii)</li> <li>7. Type of examination - Table (viii)</li> <li>8. Journal of control technical accounting</li> <li>9. Records of personnel radiation doses</li> <li>10. The exposure parameters are according to the investigation.</li> <li>11. Capacity of polyclinics and outpatient clinics</li> </ol>	<ol style="list-style-type: none"> <li>1. Registration form of industrial injuries and accidents</li> <li>2. Journal of fire prevention instruction accounting</li> <li>3. Risk assessment form</li> <li>4. The report of the investigation of the accident in the workplace by the supervisory body</li> </ol>

**Table 11. Data flow of various forms collected under Service for Accounting, Reporting and Auditing Supervision (SARAS), Georgia**

State Agency	Service for Accounting, Reporting and Auditing Supervision (SARAS)
Forms in PHC services	<ol style="list-style-type: none"> <li>1. General and administrative expense form</li> <li>2. Income statement form</li> <li>3. Amalgamator' s Income Statement - Consolidated results of operations</li> <li>4. Capital flow.</li> <li>5. Profit Loss Profitability Margin Form</li> <li>6. Balance</li> <li>7. cash flow</li> <li>8. Value added tax declaration form</li> </ol>