

Universal Health Coverage for the Poor and Informal Sector in Africa: A Health  
Financing Policy Analysis

by

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Thesis submitted in partial fulfillment of  
the requirements for the degree of  
Master of Science in Global Health  
in The Graduate School of Duke University

2022

ABSTRACT

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## **Abstract**

### Background:

In their pursuit of Universal Health Coverage (UHC), a challenge African countries face is extending health coverage to the poor and informal sector. This group accounts for a significant proportion of the population in most African countries, yet there is a wealth of evidence documenting their low health coverage and a contrasting paucity of data available to inform financing policy reform. This thesis intends to collect and apply data to this challenge, redressing this paucity and generating evidence on policies that support a fair, progressive realization of UHC.

### Methods:

I used a policy surveillance methodology to transform the text of health financing laws and policies into quantitative and qualitative data for analysis. I surveyed the 47 countries of the World Health Organization AFRO region with a codebook consisting of 28 questions relating to the coverage of the poor and informal sector. I answered questions using publicly available, country level documents. I used the data to (i) identify prevailing financing policies to provide health coverage to the poor and informal sector and (ii) present a comparative case analysis examining associations between health financing policies and essential health service coverage.

### Results:

Health insurance and user fees are predominant UHC financing approaches in Africa. 45 of 47 countries (96%) have health insurance policy and 34 countries (72%) have policy enforcing user fees. To help the poor and informal sector overcome these financial access barriers, countries use exemptions and subsidies. Of the 45 countries with health insurance, 18 (40%) exempt or subsidise premiums for the poor. Of the 34 countries with user fees, 18 (53%) exempt and/or subsidise user fees for the poor. Of the 41 countries with health service packages, 19 countries (46%) provide the health services for free. In general, there is a lack of targeted financing mechanisms for the informal sector.

#### Conclusions:

Extending coverage to the poor and informal sector is a challenge within the broader context of expanding UHC in Africa. This study provides a comprehensive overview of financing policy solutions from within the continent and lays the foundation for further analyses to clarify what reforms work best.

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This research project was inspired by my personal philosophy on development in Africa. Change will come from good governance and smart policies. I am eager to support those efforts, as a scholar of the diaspora, in any way that I can.

# 1. Introduction

Universal Health Coverage (UHC) is defined as all people receiving quality health services that meet their needs without being exposed to financial hardship in paying for the services.<sup>1</sup> Achieving UHC is at the forefront of global and national agendas on health.<sup>2(p3)</sup> A challenge that many lower and middle-income countries (LMICs) face in reaching UHC is the coverage of the poor and informal sector. These groups make up a large proportion of these countries' populations, however access to health care and financial risk protection among these groups is low.<sup>3-5</sup>

Efforts by LMICs to reach UHC have concentrated on the reduction out-of-pocket (OOP) payments through the expansion of health insurance.<sup>6,7</sup> Health insurance involves a group of individuals contributing to a common pool of funds that are used by those individuals to purchase health services.<sup>8</sup> Health insurance can be exclusionary of the poor when premiums exceed their ability to pay, and exclusionary of the informal sector when contributions are collected through formal employment arrangements, as is done in social health insurance (SHI).<sup>9</sup> OECD data shows that, across 33 developing and emerging countries for which data are available, formal workers enjoy a greater health insurance coverage rate (73%) than informal workers (28%).<sup>10</sup> Low coverage of the poor and informal sector is a great affront to health equity as well as the over-arching goal of UHC because these groups often have greater health needs than other less vulnerable

groups.<sup>11</sup> Poverty and informality have been shown to negatively impact health seeking behaviours and health outcomes.<sup>12,13</sup>

While the poor and informal sector may be difficult to reach, a number of global health bodies condemn them being left out on this basis.<sup>14</sup> For instance, a 2014 report by the World Health Organisation (WHO) listed “to first include in the universal coverage scheme only those with the ability to pay and not include informal workers and the poor” as one of five unacceptable trade-offs in the pursuit of UHC.<sup>14</sup> The report promotes an approach to UHC that includes poor and other disadvantaged groups (like the informal sector) from the beginning, a notion enshrined in the principle of progressive universalism.<sup>15</sup> Progressive universalism in UHC has been endorsed by The Lancet Commission on Investing in Health<sup>16</sup> and by authors of “Leave No One Behind: Time for Specifics on the Sustainable Development Goals”,<sup>17</sup> LNOB being a promise that was attached to the United Nation’s 2030 Sustainable Development Goals (SDGs).<sup>18,19</sup>

The challenge of providing coverage to the poor and informal sector is salient in Africa, a continent where informal employment accounts for 86% of total employment<sup>20</sup> (89% in sub-Saharan Africa) and 40% of the population live on less than \$1.90 a day.<sup>21</sup> Recognition of this has spurred research in this area. In Africa, most research is at the national or sub-national level,<sup>22-24</sup> this being a scope at which strategies targeting the

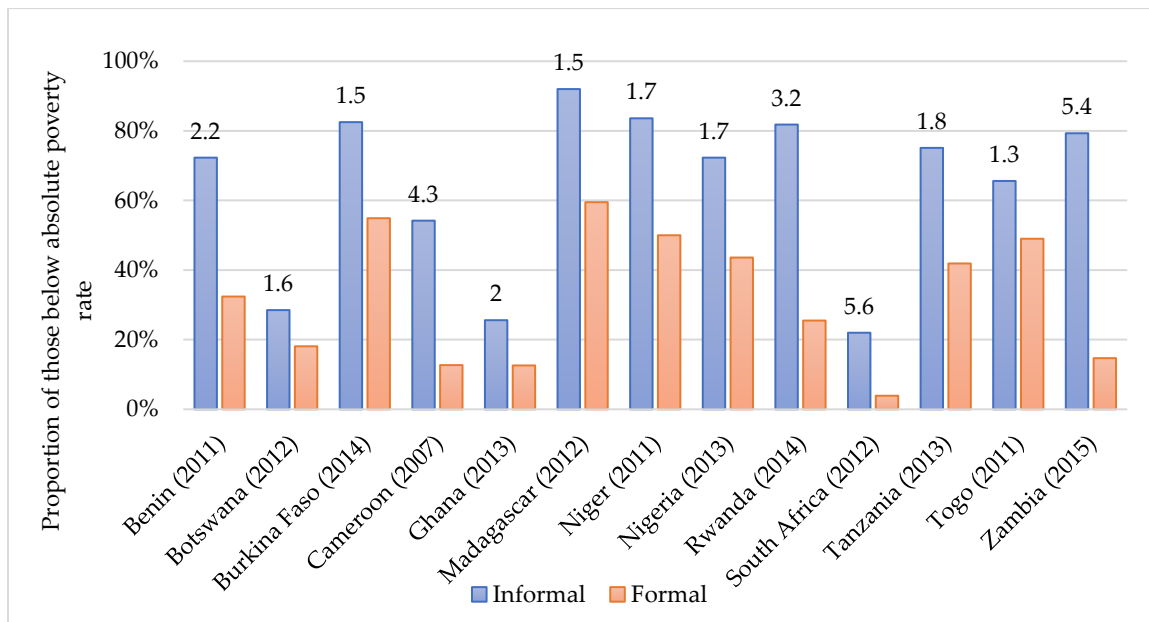
poor and informal sector have been manageably implemented and evaluated. There have been limited regional-level research efforts,<sup>25-27</sup> and these tend to focus on a recurring set of countries within sub-Saharan Africa including Ghana, Kenya, Rwanda, Senegal and Tanzania.<sup>25,26,28,29</sup> Research on this challenge has also not been policy-oriented. Little is known about how to develop an enabling law and policy environment that would support African policymakers' response to this challenge.

In this respect, this thesis will capture how the 47 countries of the WHO African Region,<sup>30</sup> through health law and health financing policy, extend health coverage to the poor and informal sector. Through policy surveillance methods,<sup>31</sup> this study will create quantitative and qualitative data on African countries' health financing laws and policies relating to the coverage of the informal sector and the poor. In doing so, this study seeks to capture the nature of and variation in these laws and policies. This study further uses a comparative case study approach to conduct a snapshot analysis of these policies.

## **1.1 Poor and Informal Sector**

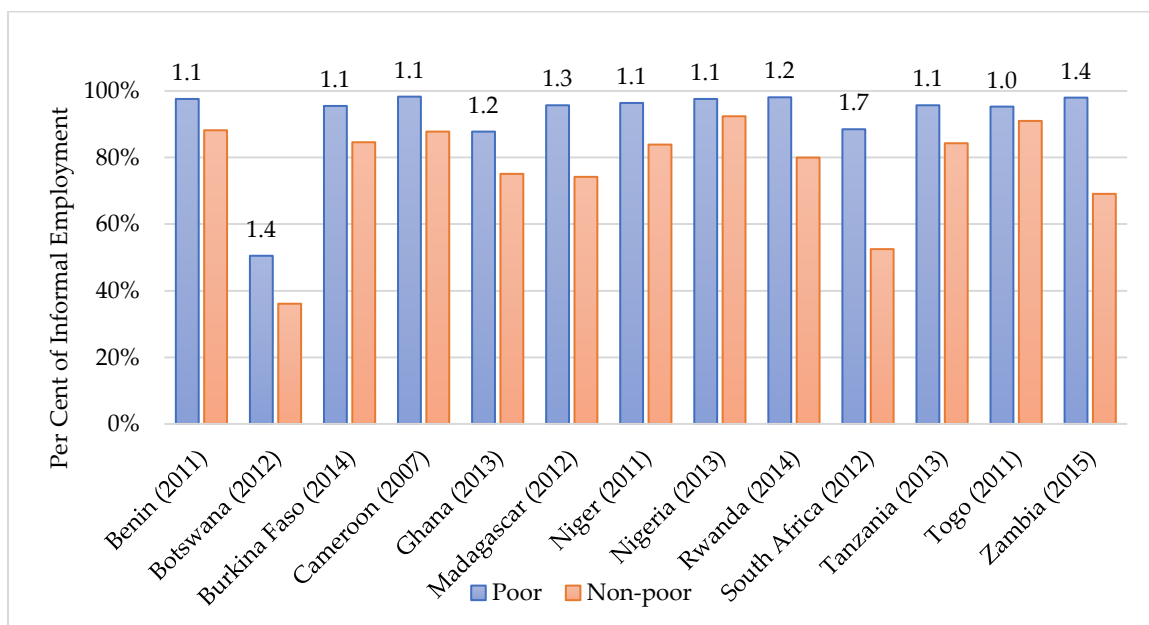
Informality and poverty are concentrated in sub-Saharan Africa. Of the estimated 2 billion informal workers worldwide, Africa is home to approximately 350 million (18%).<sup>32</sup> The continent claims the second largest share of the world's informal sector

population, beaten only by Asia on the merit of population size. In way of poverty, Africa is home to 62% of the world's global poor.<sup>21</sup> There is a close relationship between informality and poverty.<sup>32,33</sup> A 2018 report by the International Labour Organisation (ILO) showed that for a range of developed, emerging and developing countries, there is a higher rate of poverty among informal workers than formal workers, and that the working poor also face higher rates of informal employment than the working non-poor.<sup>20</sup> The statistics for the 13 African countries included in the ILO's calculations are displayed below (Figure 1 and 2).



Source: Author's creation using data from ILO, 2018.<sup>20</sup> The number displayed above the graph bars is the ratio between poverty rates in the informal and formal sector.

**Figure 1: Poverty Rate in Informal and Formal Sector of 13 African Countries**



Source: Author's creation using data from ILO, 2018.<sup>20</sup> The number displayed above the graph bars is the ratio between the rate of informality among the poor and non-poor.

**Figure 2: Rate of Informality among Working Poor and Non-Poor of 13 African Countries**

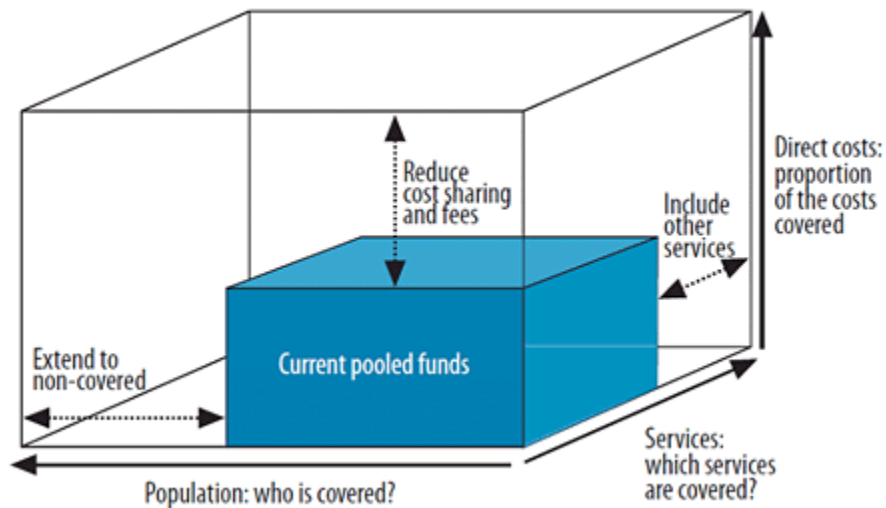
Across the 13 African countries, the average poverty rate in the informal sector was 63%, and the average informal rate among the working poor was 92%. Not all informal workers are poor and not all working poor are engaged in the informal economy - but there is significant population overlap between informality and poverty.<sup>32,33</sup> This overlap has various implications for universal health coverage; one relevant to this study is that programs and policies exclusively targeting the poor are also indirectly covering the informal sector. This study jointly considers the poor and informal sector not in neglect of important differences between the two groups, but in recognition of this overlap.



## 2. Methods

### 2.1 Conceptual Framework

This study uses the concept of health coverage linked to the UHC cube (Figure 3) popularized by the WHO 2010 World Health Report.<sup>34</sup> This cube conceptualizes health coverage as having three dimensions: service coverage, population coverage and financial protection. As this study explores the use of health financing policy to provide health coverage to Africa's poor and informal sector, it focuses on expansions in primarily, financial protection and secondarily, service coverage.



**Figure 3: Universal Health Coverage Cube**

### 2.2 Study Design

This study firstly used a policy surveillance approach<sup>31</sup> to transform the text of health financing laws and policies into quantitative and qualitative data for analysis.

Policy surveillance is a scientific approach that proceeds through various steps including background research, codebook development, the sourcing of relevant policies and laws and coding. The product of this approach was a cross-sectional dataset. This study secondly used a comparative case study approach<sup>35</sup> to analyse the collected data. The study's 47 countries were ranked by their coverage of essential health services,<sup>36</sup> and the 5 best- and 5 worst-performing countries (each judged in two ways) were grouped. Cross- and inter-group comparisons were made to uncover features of the health financing policy environment that influence health coverage for the poor and informal sector.

## **2.3 Setting**

This study focused on the 47 countries comprising the WHO African Region.<sup>30</sup> This region maps closely to the sub-Saharan Africa region and includes countries in West- East-, Central-, and Southern-Africa. 21 (45%) of the countries in the WHO African Region are low-income countries, 19 (40%) are lower-middle-income countries and 6 (13%) are upper-middle-income countries.<sup>37</sup> On average, countries spend \$128 per capita on health (range: \$20 - \$840)<sup>38</sup> and the average ratio of out-of-pocket (OOP) payments to total health spending is 36% (range: 3% - 75%).<sup>39</sup> Financial risk protection and coverage of essential healthcare services in Africa are low. About 97 million people incur

catastrophic healthcare costs each year<sup>40</sup> and approximately 615 million do not have access to the healthcare services that they need.<sup>41</sup>

## **2.4 Data Collection**

Data collection was conducted using policy surveillance methods as earlier described. The process began with a broad scoping landscape review of the health financing laws and policies in place in ten randomly selected countries in the WHO African Region. The product of this review was a policy memorandum that provided context on the region's health financing policy and law. The codebook was developed with this context in mind, and questions were created that would yield information relevant to the project's objectives and research questions. The following legal and policy instruments were identified as constructs of interest for the study: the right to health care,<sup>42,43</sup> health insurance schemes and accompanying premium subsidies, risk pooling,<sup>44</sup> cross-subsidization,<sup>45</sup> user fees and accompanying service-based/group-based subsidies, benefit packages and essential medicine lists (Table 1). These constructs were converted into questions that formed the codebook. The codebook was circulated to subject matter experts for review. Following this circulation, the codebook was revised, and questions were entered into the web-based software-coding platform MonQcle. The codebook evolved throughout the coding process; the finalized version is included in Appendix A.

**Table 1: Study's Constructs of Interest / Health Financing Policy Instruments**

<b>Constructs of Interest</b>
<u>Right to Health Care</u> is an extension of the right to health that was first articulated in the 1946 Constitution of the World Health Organization. <sup>34</sup>
<u>Health Insurance Schemes</u> involve a group of individuals contributing to a common pool of funds that are used by those individuals to purchase health services. Health insurance schemes can be classified by criterion such as their sources of financing and the level of compulsion of the scheme. Based on the criteria of 'source of financing', there are principally two types of health insurance: private and public. Private health insurance schemes are offered by private entities. Public health insurance schemes are financed through taxation or payroll contributions. <sup>47</sup>
<u>Insurance Premium Subsidies/Exemptions</u> are subsidies and exemptions applied to the premiums that members of insurance schemes pay toward the common pool of funds. (Exemptions = 100% subsidies)
<u>Risk Pooling</u> is a health system function that serves to spread the financial risk associated with the need to use and pay for health services, so that this risk is not fully borne by an individual who falls ill.
<u>Cross-Subsidization</u> is a health system function whereby, through pooling of funds, the risk related to financing health interventions is redistributed among individuals with varying risk and income levels. Cross-subsidization can take place within and across risk pools.
<u>Group-Based User Fee Subsidies/Exemptions</u> are subsidies and exemptions that are awarded to individuals based on their belonging to a particular vulnerable group.
<u>Service-Based User Fee Exemptions</u> exempt individuals from paying for certain health services.
<u>Financial Assistance</u> is a catch-all term to describe any form of financial assistance intended to offset the cost of seeking health care, that does <i>not</i> fall under previously listed financing tools. Examples include health equity funds (HEFs), which are arrangements that pay public health facilities the user fees for services rendered to eligible vulnerable groups.
<u>Health Services Package</u> is a set of health services prioritised by a government. There are two types of common packages. <u>Minimum Benefits Package (MBP)</u> is a set of health services covered by a health insurance provider. Benefit Packages are intended to be feasibly financed and provided under the circumstances a country finds itself. <u>Essential Health Services Package (EHSP)</u> is a set of priority health services that a country's government is providing or is aspiring to provide to its citizens in an equitable way.

Coding was performed by a multidisciplinary multilingual team, all of whom had previous familiarity with health policy in Africa. Prior to coding, coders underwent an onboarding process in which they were introduced to the policy surveillance methodology and the project's constructs of interest. They were then assigned to do a 'trial run' of coding for a country from the study (coding output from this was not part of the project's results). Of the 47 countries in the WHO African Region, 22 are Anglophone, 19 are Francophone and 5 are Lusophone.<sup>48</sup> Anglophone countries were coded by an Anglophone team member, Francophone countries by a Francophone and Lusophone countries by a Lusophone. Algeria is the sole Arabophone country in the WHO African Region.<sup>49</sup> An initial search for Algerian source documents revealed that none besides the country's constitution were available in English/French. As we had no Arabophone team member, data collection for Algeria was limited to the constitution.

Quality control occurred throughout the coding process. Coding performed by other members of the coding team (8 countries) was checked by myself on a country-by-country basis and in a question-by-question manner. As this quality control process did not involve two rounds of independent coding, a rate of divergence was not calculated, however all divergences were reviewed. Most divergences were interpretive - where the coders disagreed based on a different interpretation of the law or of the question. These were resolved in various ways including a recode, modification of the question,

modification of the answer responses, collection of additional law and/or refinement of the coding instructions accompanying the codebook. For coding performed by me (39 countries), a sample of 10 countries (26%) were assigned to two other coders to independently code. For this coding, the rate of divergence was 14%. These divergences were similarly reviewed and resolved.

Publicly available, country level documents that contained health policies and laws were the principal sources of data. For finding these, Ministry of Health sites were fruitful as well as multi-country health resource databases such as the WHO MiNDbank<sup>50</sup> and MEDBOX.<sup>51</sup> Efforts were made to ensure that documents cited were the most recent iterations available. A full list of source materials is available upon request from the author. Coding took place from July to December 2021 and a total of 1274 responses were collected. The full dataset is available online ([https://monqcle.com/previewer/overview\\_plugin/60ca6388f5f53c3e4f8b457d](https://monqcle.com/previewer/overview_plugin/60ca6388f5f53c3e4f8b457d)).

## **2.5 Analysis**

Data collected in the policy surveillance process was extracted from MonQcle for analysis. The decision of what data to analyse and how was mainly informed by the

project objectives and research questions, but also data completeness.<sup>1</sup> The analysis was divided into two parts.

*AIM 1: To create quantitative and qualitative data on African countries' health financing laws and policies relating to the coverage of the informal sector and the poor.*

Policy surveillance was used to transform the text of health financing laws and policies into data for analysis.

*AIM 2: To capture the nature of and variation in African countries' health financing laws and policies relating to the coverage of the informal sector and the poor.*

I undertook a descriptive analysis of African countries' constitutional provisions on health care, data contained in questions one to three in the codebook (Appendix A). Subsequent analysis looked at the frequency of health financing tools, earlier identified as constructs of interest, across countries' laws and policies. This data was extracted by questions four to eleven (Appendix A). The number of countries using each policy

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<sup>1</sup> One of the pitfalls of relying on publicly available documents was that it was difficult to conclusively say that a policy did not exist because it was not found. Policies for mainstream health financing methods such as health insurance and user fees were almost always found so this was not a concern in these areas. It was a large consideration for policies about downstream health financing components such as risk pooling and cross-subsidization. To account for this, 'Undetermined' was made a possible answer choice. For questions where 'Undetermined' was a frequent response, analysis shifted away from being quantitative i.e. what proportion of countries have this policy, toward exploring qualitatively what the policy looked like in the countries that it was found.

instrument was recorded, and variations in the way in which they were applied were expanded on with qualitative analysis.

*AIM 3: To examine the outcomes of African countries' health financing policies addressing the coverage of the poor and informal sector.*

Using a comparative case study approach,<sup>35</sup> I conducted a snapshot analysis of the associations between choice of health financing policies and progress toward UHC. The outcome variable of interest was coverage of essential health services (SDG Indicator 3.8.1), used by this study as a proxy of the progress toward UHC. This index was created to monitor progress towards SDG Target 3.8 of achieving UHC.<sup>36</sup> Methods for creating this index have been previously described.<sup>52</sup> In brief, the index combines coverage measures of 14 tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, noncommunicable diseases and service capacity and access. The index is reported on a scale of 0 to 100, with 100 being the optimal value. I used this index to develop two rankings; one based on countries' 2019 index and another on countries' absolute change in index between 2000 and 2019. For both rankings, I made a category for the five top-performing countries and another for the five bottom-performing countries, creating four categories in total.

I began comparative analysis by contextualising categories using the averages of two measures: Gross Domestic Product (GDP) per capita<sup>53</sup> and share of informal employment.<sup>54</sup> I included GDP per capita because it strongly influences a government's



ability to generate revenue which is critical to understanding a government's capacity for health spending.<sup>55</sup> I included share of informal employment because informality has implications on health coverage.<sup>56</sup> Next, I compared the similarities and differences in the design of financing policies among and between categories.

## 3. Results

### 3.1 Legal Framework for Universal Health Coverage

Table 2 presents data summarising how prevalent three constitutional provisions on health care are across the countries of the WHO African region. In 16 of the 47 countries (34%), the right to health care is enshrined in the constitution (Table 2). South Africa's constitution states that "everyone has the right to have access to a. health care services, including reproductive health care".<sup>57</sup> Similarly, the constitution of Mozambique declares that "all citizens shall have the right to medical and health care". An obligation that arises under this right is the provision of health care. Of the 16 countries that recognise access to health care as a human right, 10 countries (56%) impose a duty on the government to provide it. Gambia's constitution states that "The State shall endeavour to facilitate equal access to ... medical services ... to all persons." Malawi's constitution states that "The State shall actively promote the welfare and development of the people of Malawi by progressively adopting and implementing policies and legislation aimed at achieving the following goals - ... c. To provide adequate health care, commensurate with the health needs of Malawian society and international standards of health care."<sup>58</sup> Beyond recognition of access to health care as a human right and provision of health care, four countries - Angola, Côte d'Ivoire, the DRC and Senegal - guarantee access to health care for specified vulnerable groups. These groups include children, the disabled, the elderly, the rural-living and pregnant

women. Cote d'Ivoire guarantees access to "vulnerable persons".<sup>59</sup> No African constitution explicitly guarantees access to health care for either its informal sector or its poor. While this could be implicit in a constitution's guarantee of access to all, of the countries in the WHO African Region, no constitution does so.

**Table 2: Comparison of Constitutional Provisions on Health Care across African Countries**

Question	Countries	Commentary
1. Does the country's constitution recognise access to health care as a human right?	Algeria, Angola, Burundi, Cape Verde, Comoros, Côte d'Ivoire, DRC, Ethiopia, Gambia, Ghana, Kenya, Madagascar, Mozambique, South Africa, São Tomé and Príncipe, Uganda, Zimbabwe ( <b>17 countries</b> )	16 countries recognise access to health care as a human right.
2. Does the country's constitution impose a duty on the government to provide health care?	Algeria, Angola, Cape Verde, Comoros, DRC, Eritrea, Eswatini, Gambia, Ghana, Madagascar, Malawi, Mozambique, Niger, Nigeria, Seychelles, Sierra Leone, South Sudan, Uganda, Zimbabwe ( <b>19 countries</b> )	9 of the 19 countries that impose a duty on the government to provide healthcare do so without constitutional recognition of health care as a human right.
3. Does the country's constitution guarantee access to health care for the informal sector and/or the poor?	None ( <b>0 countries</b> )	4 countries guarantee access to health care for other specified vulnerable groups. These groups include children, the disabled, the elderly, the rural-living and pregnant women.

## **3.2 Policy Overview**

Health insurance, user fees and health service packages were found to be common health financing approaches across the study countries. These will be reviewed in turn.

### **3.2.1 Health Insurance**

Of the surveyed health financing tools and mechanisms, the most common across all African countries was health insurance schemes (Table 2). 45 of 47 countries (96%) have legislation and/or policy establishing health insurance schemes. 30 countries (64%) have a national and/or social health insurance scheme, the former defined by its' national scale and the latter by its focus on the formal sector and its joint employee-employer contribution arrangement. 38 countries (81%) have legislation and/or policy enacting other types of health insurance schemes, mainly community-based health insurance schemes or mutuelles and private health insurance schemes. The two countries without legislation and/or policy pertaining to health insurance, Mauritius and the Seychelles, both have free, government-funded primary health care (PHC). Of the 45 countries with health insurance policies, 15 (33%) offer insurance premium subsidies and exemptions for the poor and 2 (4%) offer subsidies for the informal sector.

Risk pooling and cross-subsidisation, as defined in Table 1, are insurance scheme design features that can support a health system being able to finance coverage of the poor and informal sector. To realize that objective, policy must include the poor and informal sector in large and diverse risk pools, achievable through reforms like insurance premium subsidisations/exemptions for the poor and informal sector and compulsory or automatic coverage.<sup>45</sup> Of the 45 countries with health insurance policies, 14 countries (30%) have risk pooling policies. 8 of these 14 countries (57%) do not have policy citing premium subsidies or exemptions for the poor or informal sector, implying that this group do not make up part of *any* risk pool. In Mauritania, risk pooling happens within the country's SHI scheme reserved for parliamentarians, civil servants and other occupationally related groups. Togo pools risk within a National Fund that is similarly oriented towards public officials. The country maintains a separate fund to finance subsidising and exemption mechanisms for the care of the poor. The 6 countries that have both risk pooling policy and premium exemptions/subsidies for the poor and informal sector are Côte d'Ivoire, Gabon, Ghana, Kenya, Mali and Rwanda. In some of these countries, the poor and informal sector are in a separate pool to other population groups, making the pool non-diverse and limiting redistribution. Gabon's National Health Insurance Programme has three different schemes: (i) for the poor; (ii) for civil servants and the formal sector, and (iii) for the informal sector.

Risk pooling is a precursor to cross-subsidisation, which is the redistribution of pooled resources from the healthy to the sick, and from the rich to the poor. Cross-subsidisation is implicit *within* risk pools.<sup>44</sup> Policy can enhance cross-subsidisation by enabling the redistribution of resources *across* risk pools. Five countries have cross-subsidisation policies – Côte d'Ivoire, Ghana, Nigeria, Rwanda and South Africa. Ghana uses a risk-equalization formula to allocate central funds to district health insurance schemes, subsidising the contribution levels of the poor and other vulnerable groups. Ghana also has a national health insurance fund which functions to equalize geographically-varying risk levels.<sup>60</sup> In Côte d'Ivoire, cross-subsidization takes place between two risk pools that come under the country's single national health insurance fund. The first is a contributory scheme which has mandatory registration for income-tax payers. The second is a non-contributory scheme known as the medical assistance scheme, which targets economically weak people. The government pays into the national fund on behalf of non-contributory members.

### **3.2.2 User Fees**

There are 34 countries (72%) in this study with policy implementing user fees. In these countries, fee exemptions and subsidies are a common type of financial protection mechanism used for vulnerable groups. 18 of the 34 countries (53%) using user fees have

group-based exemptions and subsidies for the poor. No countries offer exemptions and/or subsidies for the informal sector. User fee exemptions and subsidies can also be given to individuals seeking specific health services. 32 of the 34 countries use service-based exemptions, with HIV/AIDS treatment, TB treatment and immunizations being the most commonly exempted services.

### **3.2.3 Health Service Packages**

Another method used to overcome the financial access barriers presented by user fees is the provision of health service packages for free. To the health care user, there is no difference between a free health service package and a series of service-based user fee exemptions, however many countries use both policy tools concurrently, having health service packages alongside service-based user fee exemptions. Among the 47 study countries, there are two common forms of health service packages: Minimum Benefit Packages (MBPs) and Essential Health Services Packages (EHSP). MBPs are a set of health services covered by a health insurance provider. EHSPs are a set of priority health services that a country's government provides or aspires to provide to its citizens. 42 countries (93%) in this study offer health service packages. In 19 of these countries (45%), the package's services are free of charge at point-of-care.



**Table 3: Health Financing Policy Instruments and their Use in Covering the Poor and Informal Sector across African Countries**

Codebook Question	Construct of Interest	Countries	Commentary
4, 5	<u>Health Insurance Schemes</u>	Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Cote d'Ivoire, DRC, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Republic of Congo, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, South Africa, South Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe <b>(45 countries)</b>	29 countries have legislation and/or policy enacting a national and/or social health insurance scheme. 38 countries have legislation and/or policy enacting other types of health insurance schemes. Two countries have no legislation and/or policy for health insurance schemes: Mauritius and the Seychelles. In both countries, there is free access to primary healthcare for all citizens.
4.2, 4.3, 5.2, 5.3	<u>Insurance Premium Subsidies/ Exemptions</u>	Angola, Burkina Faso, Cape Verde, Côte d'Ivoire, Ethiopia, Gabon, Ghana, Kenya, Madagascar, Mali, Mozambique, Rwanda, São Tomé and Príncipe, Tanzania, Uganda, Zambia <b>(16 countries)</b>	15 of the 16 listed countries provide subsidies and exemptions for the indigent/poor, with Kenya being the exception. 2 of the 16 listed countries provide subsidies and exemptions for the informal sector: Ghana and Kenya.
6	<u>Risk Pooling</u>	Comoros, Cote d'Ivoire, Gabon, Ghana, Kenya, Malawi, Mali, Mauritania, Nigeria, Republic of Congo, Rwanda, Sierra Leone, South Africa, Tanzania, Togo, <b>(14 countries)</b>	8 countries have policy describing the pooling of risk at a national level. 1 country has policy describing risk pooling at a district level. A further 4 countries have policy

			describing risk pooling operating at an unspecified level. 2 countries have policy describing risk pooling operating at the scheme level.
7	<u>Cross-Subsidization</u>	Côte d'Ivoire, Ghana, Nigeria, Rwanda, South Africa ( <b>5 countries</b> )	In all five countries, cross-subsidisation occurs across sub-national risk pools. In Côte d'Ivoire and Ghana, cross-subsidisation takes place within a national health insurance fund.
8.2, 8.3	<u>Group-Based User Fee Subsidies/Exemptions</u>	Angola, Botswana, Burkina Faso, Burundi, Cape Verde, Central African Republic, DRC, Eritrea, Ethiopia, Gabon, Kenya, Mali, Mozambique, Namibia, Rwanda, São Tomé and Príncipe, Togo, Zimbabwe ( <b>18 countries</b> )	17 countries use exemptions, and 2 countries use subsidies for the poor. No countries offer user fee exemptions or subsidies for the informal sector.
8.4	<u>Service-Based User Fee Exemptions</u>	Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Chad, Comoros, Côte d'Ivoire, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Republic of Congo, Senegal, Sierra Leone, Tanzania, Togo, Zimbabwe ( <b>32 countries</b> )	Immunizations, ARVs and TB treatment are the most commonly exempted health care services. There are exemptions too for services related to malaria, STD/STIs, leprosy, cancer and dialysis.
9	<u>Financial Assistance</u>	Cameroon, Liberia, Madagascar, Niger ( <b>4 countries</b> )	Cameroon, Liberia and Madagascar have Health Equity Funds (HEFs). Liberia's HEF functions similar to a health insurance

			<p>scheme with direct contributions expected from the non-poor informal sector and exemptions given to the poor. Madagascar's HEF is collected through cost recovery and set aside for the care of the poor. Niger has a social health fund that ensures the coverage of care for the poor and vulnerable.</p>
10	<p><u>Health Services Package</u></p>	<p>Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Côte d'Ivoire, DRC, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Republic of Congo, Rwanda, Senegal, Seychelles, Sierra Leone, South Africa, South Sudan, São Tomé and Príncipe, Tanzania, Togo, Uganda, Zambia, Zimbabwe (<b>42 countries</b>)</p>	<p>Many countries have packages that share characteristics of both MBPs and EHSPs e.g., Zimbabwe's "essential health benefit package". 19 countries offer their package of health services for free of charge at the point-of-service. For countries with EHSPs, this typically means that the included services are free for all. For countries with MBPs, the services are only free at the point-of-service for insurance beneficiaries. In 24 of these countries, equity was expressed as a consideration in the design and/or delivery of the package.</p>

### 3.3 Comparative Policy Analysis

Table 4 summarises the use of health financing policies within four categories of countries created using methods described earlier. For each category of country, the average GDP per capita and the average proportion of the informal sector is listed. The arrow next to each health policy tool conveys how the in-group frequency of the policy compares against the policy's frequency in the overall study sample. In-table commentary on the health financing policy within the category is included.

Among the top five countries, there is a bias towards publicly funded health care. Two of the five countries in this group, Mauritius and Seychelles, have publicly funded national health services (NHS). The three countries that remain are Cape Verde, Namibia and South Africa. All have SHIs that (true to their classic definition) are reserved for public sector workers; all also use additional tax-financed mechanisms to deliver health care to the poor and informal sector. Cape Verde and Namibia enforce user fees and exempt these for the poor. Cape Verde and South Africa both have health service packages that are offered for free. Cape Verde pays SHI premiums on behalf of the poor, making it the only country to make provisions for the poor within its health insurance scheme. The top five countries are an anomalous category from the perspective of both high GDP per capita and low degree of informality, hinting that this category's health financing 'policy-scape' may have low generalizability to other African

countries. Average GDP per capita in Sub-Saharan Africa is \$1501<sup>61</sup> while in this group it is \$6,458. Likewise, informal employment is 89% of employment in Sub-Saharan Africa<sup>20</sup> but 38% of employment in this group (Table 4). Research has shown that SHI functions better in contexts with low poverty rates<sup>29</sup> and high capacity to provide health care.<sup>62</sup>

The bottom five countries have a GDP per capita that is less than a tenth of the top five countries' GDP per capita (Table 4). Their informal sector makes up almost twice as much of the working population as it does the top five countries'. All the bottom five countries have health insurance. Central African Republic, Guinea-Bissau, Madagascar and South Sudan have NHI/SHI policy, while Chad and Madagascar have policy for mutuelles. Central African Republic, Chad and Madagascar all have user fees. Central African Republic exempts these for the poor, while Madagascar has a health equity fund that is used to finance health care for the poor. Despite the prominence of the informal sector in these countries, no targeted policies exist for the group. Within this category of countries, Madagascar and South Sudan's policy approaches stand out as pro-poor. Madagascar has both SHI and sub-population health insurance in the form of mutuelles. Chad is the sole country in the group that exempts insurance premiums for the poor. South Sudan has free PHC.

Among the five most improved countries there are a few shared financing policy choices, beginning with NHI/SHI. All five countries have NHI/SHI. Specifically, Senegal,

Rwanda and Cape Verde have SHI; Rwanda, Uganda and South Africa have NHI. In Rwanda and South Africa, policy/law states that the NHI is to serve an umbrella for existing health insurance schemes, namely SHIs and CBHIs in Rwanda and medical aid schemes in South Africa. The linking of these health insurance schemes under NHI facilitates risk pooling and cross-subsidisation; policies are in place organising both functions in Rwanda and South Africa. In the five most improved countries, health insurance exists alongside additional health financing provisions. All five countries have health service packages. Cape Verde, South Africa and Uganda offer theirs for free while Senegal and Rwanda have co-payments with their benefit packages. In way of user fees Uganda has none (free PHC) but all other four countries enforce user fees. Cape Verde and Rwanda exempt these fees for the poor but not the informal sector, and Senegal and South Africa do not exempt user fees for either of these groups. Perhaps the only stand-out policy feature of this group is the dual existence of national and sub-national health insurance schemes. However South Africa's NHI Bill was passed in 2019 and Uganda's NHI Bill was passed in 2021, meaning that their progress in increasing health coverage occurred without NHI. Are sub-national health insurance schemes associated with the success of these countries in expanding health coverage?

While the five least-improved countries have a smaller GDP per capita and a higher degree of informality than the five most-improved countries, the degree of

difference is small. The least-improved countries have a \$1,951.46 GDP per capita, compared to \$2,362.38 for the most-improved countries. The least-improved countries have an average rate of informal employment of 79%, 16% higher than that of the most-improved countries. All five countries have health insurance policy. Benin, Equatorial Guinea and South Sudan have NHI/SHIs; Benin, Chad and DRC have CBHIs. The prevalence of health insurance policy among this category is indistinguishable from the five-most improved countries, however the use of premium exemptions/subsidisations for the poor and informal sector is. None of the five least-improved countries offer insurance premium exemptions subsidisations/exemptions for their poor or informal sector. None have policy organising risk pooling and cross-subsidisation. Benin, DRC and Equatorial Guinea enforce user fees. Benin and DRC offer subsidies/exemptions for the poor, while South Sudan has free PHC.

Table 4: Comparative Policy Analysis

Coverage of Essential Health Services (SDG 3.8.1)	Average GDP per capita, 2020	Average Informal Sector %	Policy Frequency (↑/↓ in relation to regional average)	Commentary
<p><b>Top 5 Countries (SDI in %, 2019)</b></p> <p>Algeria (75%)</p> <p>1. Seychelles (70%)</p> <p>2. Cape Verde (69%)</p> <p>3. South Africa (67%)</p> <p>4. Mauritius (65%)</p> <p>5. Namibia (62%)</p>	\$6,458.34	38%	<p>Health Insurance (3 out of 5) ↓</p> <p>Insurance Premium Subsidies/Exemptions (1 out of 5) ↓</p> <p>Risk Pooling (1 out of 5) ↓</p> <p>Cross-Subsidization (1 out of 5) ↓</p> <p>Group-Based User Fee Subsidies/Exemptions (2 out of 5) ↑</p> <p>Service-Based User Fee Exemptions (2 out of 5) ↓</p> <p>Financial Assistance (0 out of 5) ↓</p> <p>Benefits Package (3 out of 5) ↓</p>	<p>The sole two countries in the study sample that do not have health insurance policy are in this category: Mauritius and the Seychelles. Of the remaining three countries that use health insurance, one has policy exempting premium payments from the indigent/poor: Cape Verde. South Africa's NHI has policy for risk-pooling. Cape Verde and Namibia have policy enforcing user fees. Both countries have policy exempting the poor/indigent from payment; no countries have equivalent policy for the informal sector.</p>
<p><b>Bottom 5 Countries (SDI in %, 2019)</b></p> <p>1. Chad (28%)</p>	\$494.16	78%	<p>Health Insurance (5 out of 5) ↑</p> <p>Insurance Premium Subsidies/Exemptions (1 out of 5) ↓</p> <p>Risk Pooling (0 out of 5) ↓</p>	<p>Central African Republic, Guinea-Bissau, Madagascar and South Sudan all have national/social health insurance policy. Chad and Madagascar have policy for mutuelles. Central African</p>



<p>2. South Sudan (32%) 3. Central African Republic (32%) 4. Madagascar (35%) 5. Guinea-Bissau (37%)</p>			<p>Cross-Subsidization (0 out of 5) ↓ Group-Based User Fee Subsidies/Exemptions (1 out of 5) ↓ Service-Based User Fee Exemptions (3 out of 5) ↓ Financial Assistance (1 out of 5) ↑ Benefits Package (5 out of 5) ↑</p>	<p>Republic, Chad and Madagascar all have user fees. Only the Central African Republic has policy that exempts the poor from payment. None of the three countries with user fees has policy exempting the informal sector from paying. Madagascar has a HEF which is set aside for the care of the poor.</p>
<p><b>5 Most Improved (% point change in SDI, 2000 – 2019)</b></p> <p>1. Cape Verde (+34%) 2. Rwanda (+31%) 3. Senegal (+28%) 4. South Africa (+31%) 5. Uganda (+29%)</p>	<p>\$2,362.38</p>	<p>63%</p>	<p>Health Insurance (5 out of 5) ↑ Insurance Premium Subsidies/Exemptions (4 out of 5) ↑ Risk Pooling (2 out of 5) ↑ Cross-Subsidization (2 out of 5) ↑ Group-Based User Fee Subsidies/Exemptions (2 out of 5) ↑ Service-Based User Fee Exemptions (3 out of 5) ↓ Financial Assistance (0 out of 5) ↓ Benefits Package (5 out of 5) ↑</p>	<p>All of these countries have national/social health insurance policy as well as policy for other types of health insurance. All of these countries but South Africa have policy subsidising and/or exempting contributions for the indigent/poor. None have equivalent policy for the informal sector. Cape Verde, Rwanda and Senegal have policy enforcing user fees. Rwanda and Cape Verde have policy exempting the poor/indigent from payment; no country has equivalent policy for the informal sector.</p>
<p><b>5 Least Improved (% point change in SDI, 2000 – 2019)</b></p>	<p>\$1,951.46</p>	<p>79%</p>	<p>Health Insurance (5 out of 5) ↑</p>	<p>Benin, Equatorial Guinea and South Sudan have national/social health insurance policy. Benin, Chad and DRC</p>

<p>1. South Sudan (+12%)  2. Chad (+12%)  <del>Algeria (+14%)</del>  3. Benin (+15%)  4. DRC (+16%)  5. Equatorial Guinea (+17%)</p>		<p>Insurance Premium Subsidies/Exemptions (0 out of 5) ↓  Risk Pooling (1 out of 5) ↑  Cross-Subsidization (0 out of 5) ↓  Group-Based User Fee Subsidies/Exemptions (1 out of 5) ↓  Service-Based User Fee Exemptions (4 out of 5) ↑  Financial Assistance (1 out of 5) ↑  Benefits Package (4 out of 5) ↓</p>	<p>have policy enacting other types of insurance. None of the countries have insurance premium subsidies/exemptions for the informal sector and/or the poor. Four of the countries have policy enforcing user fees, every country but South Sudan. Only DRC has policy exempting the poor/indigent from payment; no country has equivalent policy for the informal sector.</p>
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## 4. Discussion

The idea of UHC is built upon the premise that health care is a human right. In 16 of the 47 surveyed countries (34%), this right has been recognised in the constitution (Table 2). The right to health care implies a set of obligations on states to ensure that this right is met; approximately a third (40%) of constitutions impose a duty on the state to provide health care. What is the impact of constitutional provisions like these on downstream health financing laws and policies? Numerous countries in the WHO African region state constitutional provisions as a driving and shaping factor in their development of health financing law and policy, however my project did not investigate if there is a difference between the policies of countries in which constitutional provisions on health exist and countries in which they do not. There is considerable debate on the value of rights on health. Some say that the right has “jurisprudential novelty” and has no real impact on citizens’ access to health care.<sup>63,64</sup> However, a number of studies have identified a positive effect of a constitutional right to health care on health outcomes.<sup>65,66</sup> How (or even whether) the mechanism of change behind this observed positive effect involves health financing policy is unclear. There is evidence that institutional environments shaped by a right to health encourage more and better delivery of health services, suggesting that something different could be happening in the financing policy of countries with a right to health.<sup>67</sup> My study does not attempt to

answer these questions, however the data that it produces could be of use in research that does.

Health insurance and user fees were found to be the predominant health financing approaches in Africa. 45 of 47 countries (96%) have health insurance and 34 countries (72%) have user fees. There are two countries in the study without either financing mechanism: Mauritius and the Seychelles. These countries have publicly-funded health care provided through a national health service (NHS). However, these countries still lean on traditional financing mechanisms e.g. the Seychelles exploring the option of a national health insurance system to improve domestic resource mobilisation.<sup>68</sup> With health insurance and user fees, efforts to reach the poor and informal sector mainly take the form of exemptions and subsidies of insurance premiums and user fees. Of the 45 countries with health insurance, 18 (40%) exempt or subsidise premiums for the poor. Of the 34 countries with user fees, 18 (53%) exempt and/or subsidise user fees for the poor. A third approach is the provision of health service packages. 41 of 47 countries (87%) have health service packages; 19 countries (46%) provide the services for free.

There is much less recognition of the informal sector than there is the poor across health financing instruments and wider health financing policy in Africa. As earlier

stated, there is a large overlap between the poor and the informal sector such that by default, a large proportion of the informal sector are protected by pro-poor policies. The group that remains is the non-poor informal sector, those who do not meet thresholds for poverty-status. How vulnerable are the non-poor informal sector? Literature on informality stresses vulnerabilities related to informality that exist separate from poverty.<sup>26,69</sup> Informal workers encounter specific barriers to health care access related to the nature and context of their unstable employment and unfair working conditions.<sup>4,13,70</sup> However, it seems a valid assumption that a high income would confer some degree of protection against the usual vulnerabilities of informal employment. At the same time, there is an argument that in the absence of social protection, today's non-poor can be vulnerable to becoming tomorrow's poor. How should the non-poor informal sector be envisaged by health financing policymakers? A 2021 World Bank report entitled "Social Protection for the Informal Economy: Operational Lessons for Developing Countries in Africa and Beyond" offers a typology for non-poor, informal households that incorporates their resiliency to financial shocks to better convey social protection needs.<sup>71</sup> The typology can be implemented using existing household survey data and could be a first step for health financing policy makers seeking to understand and provide coverage to the non-poor informal sector. Applying their typology, the report analysed six countries across Africa - Benin, Kenya, Rwanda, Togo, Uganda and Zambia – and found that while many non-poor informal households (50.8%) had experienced a

significant economic shock in the past 12 months, a roughly equal number had not.

These findings point at an added reason for further research on the non-poor informal sector, which is that a segment of the non-poor informal sector have the ability to save and contribute to the costs of their health care.

#### **4.1 Study strengths and limitations**

To the best of my knowledge, this is the first legal mapping project oriented to the challenge of providing health coverage to the poor and informal sector in Africa that has been done. The rigor of the policy surveillance methodology and its application to this challenge are major strengths of this project. Policy surveillance is a scientific methodology that places focus on producing highly accurate data through its citation requirements and repeated steps of quality control.<sup>72</sup> The methodology was well-suited to the first and foremost aim of this project - to create data on African countries' health financing laws and policies relating to the coverage of the informal sector and the poor. At the same time, it allowed for the creation of a dataset that can be used to answer many more questions than this project's aims answer. This dataset creates opportunities for the analysis of African countries' financing policy approach to more than just providing health coverage to the poor and informal sector.<sup>73</sup>

Applying the policy surveillance methodology to this project's research questions offered many benefits but also brought tensions. Policy surveillance is based on the explicit text of the law or policy. The written words of legal text, however, take their meaning from their context and often require interpretation.<sup>74</sup> For example, when scanning for certain health financing instruments within countries' policies, sometimes use of the specific policy language was absent, yet the approach encapsulated by said language was described. To ensure countries were correctly coded, interpretation of the policy's text was often required to detect the existence of the policy instrument. While necessary, this complicated data collection in various ways. Firstly, it increased the skill level required to code, as coders had to have a deep understanding of health financing policy instruments to correctly identify them within policies. Concordantly, it increased the number of coding errors observed in redundant coding, as often-time paired coders did not have the same understanding of health financing policy instruments. In the end, redundancy was deprioritized in place of in-country review by member countries, which is a stray from the policy surveillance methodology ideals but an adaptive response to the research context.

The third aim of this project was to examine the outcomes of health financing policies relating to the poor and informal sector. As shown by the project, it is possible to find and examine laws and policies that relate specifically to this group. It is, however,

difficult to find data on health coverage and other health financing policy outcomes among Africa's poor and informal sector. This was a key limitation for the analysis this thesis intended to carry out, and equally limits any attempt outside of this project to discern the impact of health financing policy on these groups. A further limitation in this project's policy analysis was the gap that exists between health policies on paper and health policies on the ground. This project makes no attempt to measure that gap as it instead focuses on the policy space; policy surveillance does not observe policy as settled practice, there must be a text. This is a feature of the project that limits the policy analysis.

## **4.2 Implications for policy and practice**

There needs to be more health financing policy tailored towards the informal sector. At current, health coverage for Africa's informal sector relies on policies that are created for the poor. This leaves the non-poor informal sector unaccounted for by health financing policy, which is an issue for two reasons. Firstly, informality and poverty are overlapping but different sources of vulnerability; they relate differently to access to health care, financial risk protection and health outcomes.<sup>75</sup> Secondly, there is a missed opportunity. Using health financing policy to engage segments of the informal sector that can contribute towards their own health care can help focus constrained fiscal resources on the most vulnerable via non-contributory or subsidized programs.



### **4.3 Implications for further research**

My study points to several directions for future research, some of which relate specifically to the problem of the poor and informal sector, others of which relate more broadly to the over-arching challenge of UHC. Accurate and relevant information on the poor and informal sector is critical for tailoring health financing policies to their health needs. In 2018, Okungu et al. conducted research in which informal workers in Kenya were asked how they would like health insurance provided.<sup>22</sup> The direct engagement of the poor and informal sector in research is an approach that holds promise for increasing their participation in prepayment schemes and thus their health coverage.

## **5. Conclusion**

Extending coverage to the poor and informal sector is a challenge within the broader context of attaining UHC in Africa. By conducting research on health financing policy in Africa, this thesis aimed to create opportunity for African policymakers to look inwards for policy solutions, and more generally, to support the use of law and policy as a tool to advance UHC. This project lays the foundation for cross-country comparative analyses that will facilitate greater understanding of how financing policy can drive progress toward UHC in Africa.

## Appendix A

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Codebook Question		Coding Instructions	Answer Choices
1	Does the country's constitution recognise access to health care as a human right?	N/A	Yes, No, Undetermined
2	Does the country's constitution impose a duty on the government to provide health care?	N/A	Yes, No, Undetermined
3	Does the country's constitution guarantee access to health care for any groups?	N/A	Children, Disabled, Elderly, Indigent/Poor, Informal, Pregnant Women, Other, None, NA
4	Does the country have legislation/policy enacting a national/social health insurance scheme?	N/A	Yes, No, Undetermined
4.1	Does this legislation/policy mandate enrolment for any groups?	N/A	All, Employed, Indigent/Poor, Informal Sector, Other, None, Not Applicable
4.2	Does this legislation/policy subsidise contributions for any groups?	- Use of subsidy in Question 4.2 refers exclusively to partial coverage of costs; use of exempt in 4.3 refers exclusively to full coverage of costs.	Children, Disabled, Elderly, Indigent/Poor, Informal, Pregnant Women, Other, None, Not Applicable

4.3	Does this legislation/policy exempt contributions for any groups?	- Subsidisations/exemptions must be comprehensive rather than targeted e.g., free malaria treatment for pregnant women and children under 5 would not be relevant to Questions 4.2 – 4.3. Rather, this would be recorded in Question 8.4 as a targeted service-based user fee exemption.	Children, Disabled, Elderly, Indigent/Poor, Informal, Pregnant Women, Other, None, Not Applicable
4.4	Alternatively, are contributions based on ability to pay?	- Question 4.4 aims to capture similar data to 4.1 – 4.3 in an alternative way. Question 4.4 may be helpful in scenarios where discriminatory pricing is employed and it is unclear what prices qualify as subsidies. While it may seem intuitive to assume any price less than the highest price displayed is a subsidy, this may be an invalid assumption. - A commonly used form of income-based contributions are salary deductions for SHIs.	Yes – Income-Based, Yes – Other, No – Flat Rate, Not Applicable, Undetermined
5	Does the country have other health insurance schemes?	- Examples include private health insurance schemes, community-based health insurance schemes, voluntary insurance schemes including medical aid schemes.	Yes, No, Undetermined
5.1	Does the policy mandate enrolment for any groups?	N/A	All, Employed, Indigent/

			Poor, Informal Sector, Other, None, Not Applicable
5.2	Does the policy subsidise contributions for any groups?	N/A	Children, Disabled, Elderly, Indigent/Poor, Informal, Pregnant Women, Other, None, Not Applicable
5.3	Does this policy exempt contributions for any groups?	N/A	Children, Disabled, Elderly, Indigent/Poor, Informal, Pregnant Women, Other, None, Not Applicable
6	Is there policy organising risk pooling?	- This project considers two classes of risk pooling: national and district. - NHIFs are not automatically taken as national risk pools because	Yes – National, Yes – District, Yes – Other, Yes – Unspecified, No, Undetermined
7	Is there policy organising cross-subsidisation?	N/A	Yes – Equity, Yes – Risk, No, Undetermined, Not Applicable
8	Are there policies or regulations on user fees?	N/A	Yes - Enforcement, Yes – Exemption, Yes – Suspension, No, Undetermined
8.1	Does the legislation/policy enforce fees?	N/A	Yes, No

8.2	Does the legislation/policy subsidise fees for any groups?	N/A	Children, Disabled, Elderly, Indigent/Poor, Informal, Pregnant Women, Other, None, NA
8.3	Does the legislation/policy exempt fees for any groups?	N/A	Children, Disabled, Elderly, Indigent/Poor, Informal, Pregnant Women, Other, None, NA
8.4	For what services are user fees enforced and/or exempted?	N/A	Text Field
9	Does legislation/policy point to any financial assistance schemes?	Examples include Health Equity Funds (HEFs).	Text Field
10	Is there a policy that establishes a minimum benefits package and/or an essential health services package?	N/A	Yes, No, Undetermined
10.1	Is this package provided for free of charge at point of service?	N/A	Yes, No, Undetermined
10.2	Is this package provided to all citizens and/or beneficiaries?	N/A	Yes, No, Undetermined
10.3	Is equity expressed as a consideration in the design and/or delivery of the package?	N/A	Yes, No, Undetermined
11	Does the country offer an essential medicines list?	N/A	Yes, No, Undetermined
11.1	Does the country offer these medicines for free of charge at point of service?	N/A	Yes, No, Undetermined

11.2	Does the country offer these medicines to all citizens and/or beneficiaries?	N/A	Yes, No, Undetermined
11.3	Is equity expressed as a consideration in the design and/or delivery of the medicines list?	N/A	Yes, No, Undetermined

## References

1. Universal health coverage (UHC). Accessed January 22, 2022. [https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-\(uhc\)](https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc))
2. United Nations. Goal 3 | Department of Economic and Social Affairs. Accessed March 18, 2022. <https://sdgs.un.org/goals/goal3>
3. Sychareun V, Vongxay V, Thammavongsa V, Thongmyxay S, Phummavongsa P, Durham J. Informal workers and access to healthcare: a qualitative study of facilitators and barriers to accessing healthcare for beer promoters in the Lao People's Democratic Republic. *Int J Equity Health*. 2016;15(1):1-10. doi:10.1186/s12939-016-0352-6
4. Akazili J, Chatio S, Ataguba JEO, et al. Informal workers' access to health care services: findings from a qualitative study in the Kassena-Nankana districts of Northern Ghana. *BMC International Health and Human Rights*. 2018;18(1):20. doi:10.1186/s12914-018-0159-1
5. Kiwanuka SN, Ekirapa EK, Peterson S, et al. Access to and utilisation of health services for the poor in Uganda: a systematic review of available evidence. *Transactions of The Royal Society of Tropical Medicine and Hygiene*. 2008;102(11):1067-1074. doi:10.1016/j.trstmh.2008.04.023
6. Ifeagwu SC, Yang JC, Parkes-Ratanshi R, Brayne C. Health financing for universal health coverage in Sub-Saharan Africa: a systematic review. *Global Health Research and Policy*. 2021;6(1):8. doi:10.1186/s41256-021-00190-7
7. Lagomarsino G, Garabrant A, Adyas A, Muga R, Otoo N. Moving towards universal health coverage: health insurance reforms in nine developing countries in Africa and Asia. *The Lancet*. 2012;380(9845):933-943. doi:10.1016/S0140-6736(12)61147-7
8. WHO. *Brief 4: Risk-Pooling Mechanisms*. WHO; 2010. [https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjB-\\_ac6tD2AhURZN8KHcbsCz4QFnoECAMQAQ&url=https%3A%2F%2Fwww.who.int%2Fimmunization%2Fprogrammes\\_systems%2Ffinancing%2Fanalyses%2FBrief\\_4\\_Risk-Pooling.pdf%3Fua%3D1&usg=AOvVaw0DxbPlxjXBRO\\_265ktZTcB](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjB-_ac6tD2AhURZN8KHcbsCz4QFnoECAMQAQ&url=https%3A%2F%2Fwww.who.int%2Fimmunization%2Fprogrammes_systems%2Ffinancing%2Fanalyses%2FBrief_4_Risk-Pooling.pdf%3Fua%3D1&usg=AOvVaw0DxbPlxjXBRO_265ktZTcB)
9. Wagstaff A. Social health insurance reexamined. *Health Economics*. 2010;19(5):503-517. doi:10.1002/hec.1492



10. OECD. Informal workers by household informality (Percentage of informal workers). Accessed March 21, 2022.  
[https://stats.oecd.org/Index.aspx?DataSetCode=KIIBIH\\_B5](https://stats.oecd.org/Index.aspx?DataSetCode=KIIBIH_B5)
11. Hart JT. THE INVERSE CARE LAW. *The Lancet*. 1971;297(7696):405-412.  
doi:10.1016/S0140-6736(71)92410-X
12. Alfors L, Rogan M. Health risks and informal employment in South Africa: does formality protect health? *Int J Occup Environ Health*. 2015;21(3):207-215.  
doi:10.1179/2049396714Y.0000000066
13. Health Vulnerabilities of Informal Workers. The Rockefeller Foundation. Accessed March 18, 2022. <https://www.rockefellerfoundation.org/report/health-vulnerabilities-of-informal-workers/>
14. WHO. *Making Fair Choices on the Path to Universal Health Coverage: Final Report of the WHO Consultative Group on Equity and Universal Health Coverage*. WHO; 2014. Accessed January 31, 2022. <https://apps.who.int/iris/handle/10665/112671>
15. Gwatkin DR, Ergo A. Universal health coverage: friend or foe of health equity? *The Lancet*. 2011;377(9784):2160-2161. doi:10.1016/S0140-6736(10)62058-2
16. Jamison DT, Summers LH, Alleyne G, et al. Global health 2035: a world converging within a generation. *The Lancet*. 2013;382(9908):1898-1955. doi:10.1016/S0140-6736(13)62105-4
17. Kharas HJ. *Leave No One Behind: Time for Specifics on the Sustainable Development Goals*. (Kharas H, McArthur JW, Ohno I, eds.). Brookings Institution Press; 2019.
18. McArthur HK and J. Getting specific to leave no one behind. Brookings. Published September 23, 2019. Accessed March 17, 2022.  
<https://www.brookings.edu/blog/future-development/2019/09/23/getting-specific-to-leave-no-one-behind/>
19. Leaving no one behind — SDG Indicators. Accessed March 18, 2022.  
<https://unstats.un.org/sdgs/report/2016/leaving-no-one-behind>
20. ILO. *Women and Men in the Informal Economy: A Statistical Picture. Third Edition*. ILO; 2018. Accessed February 6, 2022.  
[http://www.ilo.org/global/publications/books/WCMS\\_626831/lang--en/index.htm](http://www.ilo.org/global/publications/books/WCMS_626831/lang--en/index.htm)

21. World Bank (Washington, District of Columbia), ed. *Poverty and Shared Prosperity 2020: Reversals of Fortune*. World Bank; 2020.  
<https://www.worldbank.org/en/publication/poverty-and-shared-prosperity>
22. Okungu V, Chuma J, Mulupi S, McIntyre D. Extending coverage to informal sector populations in Kenya: design preferences and implications for financing policy. *BMC Health Services Research*. 2018;18(1):13. doi:10.1186/s12913-017-2805-z
23. Habtom GK, Ruys P. Traditional risk-sharing arrangements and informal social insurance in Eritrea. *Health Policy*. 2007;80(1):218-235.  
doi:10.1016/j.healthpol.2006.02.013
24. Matey J. Widening the Tax Base in Ghana's Informal Sector. Published online 2018. Accessed May 9, 2021. <https://www.grin.com/document/417407>
25. Rebecca Wolfe, Kara Hanson, Di McIntyre, Ayako Honda. *Covering the Informal Sector*. RESYST; 2014. Accessed January 30, 2022.  
<https://resyst.lshtm.ac.uk/resources/covering-the-informal-sector>
26. Marilyn Heymann, Cheryl Cashin, Annette Ozaltin, Cicely Thomas, Marty Makinen. *Closing the Gap: Health Coverage for Non-Poor Informal-Sector Workers*. Results for Development; 2015. Accessed January 30, 2022. <https://r4d.org/resources/health-coverage-for-informal-sector-workers/>
27. Luize Guimarães Scherer Navarro, Tomas Lievens. Health Financing Trends in Sub-Saharan Africa. Published online June 2012.
28. Chuma J, Mulupi S, McIntyre D. *Providing Financial Protection and Funding Health Service Benefits for the Informal Sector: Evidence from Sub-Saharan Africa*. RESYST; 2013.
29. Fenny AP, Yates R, Thompson R. Social health insurance schemes in Africa leave out the poor. *International Health*. 2018;10(1):1-3. doi:10.1093/inthealth/ihx046
30. WHO | Regional Office for Africa. WHO. Accessed March 26, 2021.  
<http://www.who.int/about/regions/afro/en/>
31. Policy Surveillance Portal | A LawAtlas Project | MonQcle. Accessed March 10, 2022. <https://lawatlas.org/>

32. *Women and Men in the Informal Economy: A Statistical Picture. Third Edition.*; 2018. Accessed January 29, 2022. [http://www.ilo.org/global/publications/books/WCMS\\_626831/lang--en/index.htm](http://www.ilo.org/global/publications/books/WCMS_626831/lang--en/index.htm)
33. Florence Bonnet, Martha Chen, Joann Vanek. *Women and Men in the Informal Economy – A Statistical Brief. Women in Informal Employment: Globalizing and Organizing (WIEGO)*; 2019.
34. World Health Organization. *The world health report: health systems financing: the path to universal coverage.* World Health Organization; 2010. Accessed March 10, 2022. <https://apps.who.int/iris/handle/10665/44371>
35. Walt G, Shiffman J, Schneider H, Murray SF, Brugha R, Gilson L. 'Doing' health policy analysis: methodological and conceptual reflections and challenges. *Health Policy and Planning.* 2008;23(5):308-317. doi:10.1093/heapol/czn024
36. Coverage of essential health services (SDG 3.8.1). Accessed March 10, 2022. <https://www.who.int/data/gho/data/themes/topics/service-coverage>
37. World Bank. World Bank Country and Lending Groups. Accessed March 9, 2022. <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>
38. World Health Organization Global Health Expenditure database. Current health expenditure per capita (current US\$) | Data. Accessed March 9, 2022. <https://data.worldbank.org/indicator/SH.XPD.CHEX.PC.CD>
39. World Health Organization Global Health Expenditure database. Out-of-pocket expenditure (% of current health expenditure). Share of out-of-pocket payments of total current health expenditures. Out-of-pocket payments are spending on health directly out-of-pocket by households. Accessed March 9, 2022. <https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS>
40. World Health Organization, International Bank for Reconstruction and Development. *Global Monitoring Report on Financial Protection in Health 2021.* World Health Organization; 2021. Accessed March 16, 2022. <https://apps.who.int/iris/handle/10665/350240>
41. *The State of Universal Health Coverage in Africa.* Africa Health Agenda International Conference Commission Accessed January 30, 2022. <https://ahaic.org/download/the-state-of-universal-health-coverage-in-africa/>

42. WHO. Advancing the Right to Health through Law Reform. Accessed July 16, 2021. <https://www.who.int/healthsystems/topics/health-law/chapter1.pdf>
43. UHC law in practice: legal access rights to health care: country profile: Kenya. Accessed July 16, 2021. <https://www.who.int/publications-detail-redirect/uhc-law-in-practice-legal-access-rights-to-health-care-country-profile-kenya>
44. Smith PC, Witter SN. *Risk Pooling in Health Care Financing : The Implications for Health System Performance*. World Bank; 2004. Accessed March 3, 2022. <https://openknowledge.worldbank.org/handle/10986/13651>
45. Mathauer I, Vinyals Torres L, Kutzin J, Jakab M, Hanson K. Pooling financial resources for universal health coverage: options for reform. *Bull World Health Organ*. 2020;98(2):132-139. doi:10.2471/BLT.19.234153
46. UN Office of the High Commissioner for Human Rights (OHCHR). Fact Sheet 31 - The Right to Health. Accessed March 15, 2022. <https://www.refworld.org/docid/48625a742.html>
47. OECD. *Proposal for a Taxonomy of Health Insurance*. Organisation for Economic Cooperation and Development; 2004.
48. List of regions of Africa. In: *Wikipedia*. ; 2022. Accessed March 10, 2022. [https://en.wikipedia.org/w/index.php?title=List\\_of\\_regions\\_of\\_Africa&oldid=1075838654](https://en.wikipedia.org/w/index.php?title=List_of_regions_of_Africa&oldid=1075838654)
49. Languages of Algeria. In: *Wikipedia*. ; 2022. Accessed March 10, 2022. [https://en.wikipedia.org/w/index.php?title=Languages\\_of\\_Algeria&oldid=1074669744](https://en.wikipedia.org/w/index.php?title=Languages_of_Algeria&oldid=1074669744)
50. WHO MiNDbank - Country Resources. Accessed February 9, 2022. [http://www.mindbank.info/collection/country/africa/general\\_health\\_strategies\\_and\\_plans/all?page=all](http://www.mindbank.info/collection/country/africa/general_health_strategies_and_plans/all?page=all)
51. MEDBOX | the aid library. Accessed February 9, 2022. <https://medbox.org/>
52. United Nations Statistics Division. SDG Indicator Metadata. Published online December 20, 2021. Accessed February 19, 2022. <https://unstats.un.org/sdgs/metadata/?Text=&Goal=3&Target=3.8>
53. GDP per capita (current US\$) | Data. Accessed March 5, 2022. <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=SC>

54. Informal economy. ILOSTAT. Accessed March 14, 2022.  
<https://ilostat.ilo.org/topics/informality/>
55. Meheus F, McIntyre D. Fiscal space for domestic funding of health and other social services. *Health Econ Policy Law*. 2017;12(2):159-177. doi:10.1017/S1744133116000438
56. Lawrence P. O. Were. *The Informal Sector and Universal Health Coverage: Crucial Considerations.*; 2019. Accessed March 14, 2022.  
<https://www.bu.edu/pardee/2019/06/17/new-paper-the-informal-sector-and-universal-health-coverage-crucial-considerations/>
57. *Constitution of the Republic of South Africa.*; 1996. Accessed February 28, 2022.  
<https://www.gov.za/documents/constitution-republic-south-africa-1996>
58. Malawi Legal Information Institute. *Constitution of Malawi*. Accessed September 7, 2021. [https://malawilii.org/mw/consolidated\\_legislation/null](https://malawilii.org/mw/consolidated_legislation/null)
59. *Constitution de La Republique de Cote D'Ivoire.*; 2016. Accessed July 11, 2021.  
<https://www.presidence.ci/wp-content/uploads/2018/07/CONSTITUTION.pdf>
60. Ministry of Health Ghana. National Health Insurance Policy Framework for Ghana. Published online August 2004.  
<file:///C:/Users/Michelle/AppData/Local/Temp/National-Health-Insurance-Policy-framework-1.pdf>
61. GDP per capita (current US\$) - Sub-Saharan Africa | Data. Accessed March 14, 2022.  
<https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=ZG>
62. Carrin G. *Social Health Insurance in Developing Countries: A Continuing Challenge.* Social Science Research Network; 2002. Accessed March 14, 2022.  
<https://papers.ssrn.com/abstract=309075>
63. Ngwena C. The Recognition of Access to Health Care as a Human Right in South Africa: Is It Enough? *Health and Human Rights*. 2000;5(1):26-44. doi:10.2307/4065221
64. Pascale G. The human right to health in Africa. Published April 20, 2016. Accessed April 11, 2022. <https://voelkerrechtsblog.org/the-human-right-to-health-in-africa-great-expectations-but-poor-results/>
65. Matsuura H. The Effect of a Constitutional Right to Health on Population Health in 157 Countries, 1970–2007: the Role of Democratic Governance. :36.

66. Ben-Bassat A, Dahan M. Social rights in the constitution and in practice. *Journal of Comparative Economics*. 2008;36(1):103-119.
67. Kavanagh MM. The Right to Health: Institutional Effects of Constitutional Provisions on Health Outcomes. *St Comp Int Dev*. 2016;51(3):328-364. doi:10.1007/s12116-015-9189-z
68. Seychelles experiences on Universal Health Coverage shared at 2nd WHO African Health Forum, Cabo Verde. OMS | Bureau régional pour l'Afrique. Published March 29, 2019. Accessed February 21, 2022. <https://www.afro.who.int/fr/node/11023>
69. Annear P, Comrie-Thomson L, Dayal P. *The Challenge of Extending Universal Coverage to Non-Poor Informal Workers in Low- and Middle-Income Countries in Asia: Impacts and Policy Options.*; 2015.
70. Ametepoh RS, Adei D, Arhin AA. Occupational health hazards and safety of the informal sector in the Sekondi-Takoradi Metropolitan Area of Ghana. *Research on Humanities and Social Sciences*. 2013;3(20):87-99.
71. Guven M, Jain H, Joubert C. *Social Protection for the Informal Economy: Operational Lessons for Developing Countries in Africa and Beyond*. World Bank; 2021. Accessed March 28, 2022. <https://openknowledge.worldbank.org/handle/10986/36584>
72. Burris S, Hitchcock L, Ibrahim J, Penn M, Ramanathan T. Policy Surveillance: A Vital Public Health Practice Comes of Age. *J Health Polit Policy Law*. 2016;41(6):1151-1173. doi:10.1215/03616878-3665931
73. Kavanagh M, pillinger mara, Meier B, Huffstetler H, Burris S. Global Policy Surveillance: Creating and Using Comparative National Data on Health Law and Policy. *American Journal of Public Health*. 2020;110. doi:10.2105/AJPH.2020.305892
74. Johnson BR, Lavelanet AF, Schlitt S. Global Abortion Policies Database: a new approach to strengthening knowledge on laws, policies, and human rights standards. *BMC International Health and Human Rights*. 2018;18(1):35. doi:10.1186/s12914-018-0174-2
75. Laura Alfes. Informal Workers' Access to Health Services. WIEGO. Published July 28, 2015. Accessed March 20, 2022. <https://www.wiego.org/blog/informal-workers%E2%80%99-access-health-services>