

## **Democratization and Universal Health Coverage: A Case Comparison of Ghana, Kenya, and Senegal**

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*This article identifies conditions under which newly established democracies adopt Universal Health Coverage. Drawing on the literature examining democracy and health, we argue that more democratic regimes – where citizens have positive opinions on democracy and where competitive, free and fair elections put pressure on incumbents – will choose health policies targeting a broader proportion of the population. We compare Ghana to Kenya and Senegal, two other countries which have also undergone democratization, but where there have been important differences in the extent to which these democratic changes have been perceived by regular citizens and have translated into electoral competition. We find that Ghana has adopted the most ambitious health reform strategy by designing and implementing the National Health Insurance Scheme (NHIS). We also find that Ghana experienced greater improvements in skilled attendance at birth, childhood immunizations, and improvements in the proportion of children with diarrhea treated by oral rehydration therapy than the other countries since this policy was adopted. These changes also appear to be associated with important changes in health outcomes: both infant and under-five mortality rates declined rapidly since the introduction of the NHIS in Ghana. These improvements in health and health service delivery have also been observed by citizens with a greater proportion of Ghanaians reporting satisfaction with government handling of health service delivery relative to either Kenya or Senegal. We argue that the democratization process can promote the adoption of particular health policies and that this is an important mechanism through which democracy can improve health.*

### **INTRODUCTION**

Why should we expect democracies to be more responsive than non-democracies to the health needs of their citizens? How does the democratic process influence the particular health policies adopted by democratically elected governments? A number of empirical studies show democracies have higher levels of health and access to health services,<sup>1</sup> however the exact mechanisms through which democracy improves health have been less well established. In theory, electoral competition found in democracies is one potential mechanism: the threat of losing office via elections motivates politicians to seek policies that will gain voter approval and politicians will appeal to the electorate by advocating particular policies to influence voting. The extent to which politicians must appeal to a broader segment of the voting population should make them more likely to adopt policies that benefit a broader proportion of the population.<sup>2</sup>

This article contributes to the literature on democracy and health by identifying the conditions under which newly established democracies adopt a particular type of health policy: Universal Health Coverage (UHC). We argue that

it is not simply the level of democracy that makes governments more likely to adopt health policies that benefit the population broadly, but rather the extent to which democratic development is perceived as meaningful by citizens and is manifested in electoral competition that puts pressure on political parties to pursue universal, rather than more targeted, health policies.

Our study draws largely from the Ghanaian experience. Ghana was among the first developing countries in sub-Saharan Africa to enact what would today be described as UHC legislation. Although coverage today remains less than universal, the expansion of health insurance coverage, the utilization of health services, the levels of population health, and the proportion of the population who report satisfaction with the government's performance on health have all increased. Ghana is considered a leader among developing countries in providing UHC to its citizens.

Over the past two decades, Ghana has also transformed itself from a largely autocratic to a largely democratic country with strong political competition. Political scientists have heralded Ghana as a leading example of democracy in Africa today. In this paper we assert that the simultaneity of Ghana's democratization and pursuit of UHC is not a coincidence: the movement towards democratic government in this country was essential to the expansion of health insurance coverage. However, democratization alone does not fully explain the decision to adopt an ambitious UHC policy. Instead, we argue the extent to which citizens perceive democratic governance and the extent to which political parties in Ghana have been subject to electoral competition led to the decision to adopt a policy that broadly benefits a large proportion of the population, rather than using more targeted approaches to health financing reform.

Unlike vaccine programs, clinic construction, or user-fee exemptions, for example, UHC policies cannot be targeted to particular geographic areas or to particular ethnic groups. Since the goal is to provide *universal* coverage, policies are designed to include as many citizens as possible, which could lead to more equal and comprehensive access to health services. Drawing on the literature examining democracy and health, we would thus expect more democratic regimes – in particular those where citizens have positive opinions on democracy and where competitive, free and fair elections put pressure on incumbents – to choose health policies that target a broader proportion of the population. We also expect this democratic provision of services will have a stronger and more positive impact on health outcomes in these countries, since governments have the most incentive in these countries to ensure the success of these programs.

To examine this argument, we compare Ghana to two other African countries that have seen similar increases in aggregate measures of democracy: Kenya and Senegal. Although aggregate measures rate these three countries similarly with respect to democracy, the three cases vary on public opinion toward democracy and have experienced different levels of effective electoral competition in the multiparty era. We argue that the different nature of democracy in Ghana is part of the reason that Ghana has adopted UHC while the other countries have not. We also argue that such policy adoption has led to greater improvements in health outcomes and greater public satisfaction with government handling of health issues.

In the next section, we motivate this discussion with a review of the literature on the relationship between democracy and health. We then discuss the methods we employ in our case comparison of Ghana, Kenya, and Senegal, including the case selection process and the data used in the case studies. Our case comparison then follows in five sections: first, a comparison of the democratization process; second, a discussion of public opinion of democracy in those countries; third, a comparison of the evolution of health insurance in those countries; fourth, a comparison of health care utilization and health outcomes; and finally, a comparison of public satisfaction with government performance on health service delivery. The final section discusses our findings and some implications for other developing countries currently considering the adoption of UHC policies and concludes.

## BACKGROUND

### *The relationship between democracy and health*

The literature on the role of democracy in improving the human condition often examines democracy's impact on provision of social services, such as health and education, and the provision of public goods, such as electrification and roads. Using time-series cross-sectional analyses, Lake and Baum found that democracies produce a higher level of health and education services than autocracies.<sup>3</sup> Brown and Hunter found in Latin America that democracies allocate a greater share of resources to primary education.<sup>4</sup> On the expansion of electricity to previously unconnected citizens, Min used data from satellite imagery to show that democratization has a positive impact on electrification cross-nationally, within India, and across countries in the former Soviet bloc.<sup>5</sup>

Empirical studies have also found democratic rule leads to improved health outcomes. Democracy is correlated with improved health and healthcare access.<sup>6</sup> Cross-national analysis shows democracies have lower infant mortality rates than non-democracies,<sup>7</sup> and the same holds true for life expectancy<sup>8</sup> and maternal mortality.<sup>9</sup> Dictatorship, on the other hand, depresses public health provision, as does severe income inequality, ethnic heterogeneity, and persistent international conflict.<sup>10</sup> At least one study, however, has questioned these empirical findings. Ross found that previous analyses were sensitive to the countries included in the models and even in democracies, where governments spend more on health, the reduced infant and child mortality rates are largely transferred to the middle class, and not the poor.<sup>11</sup> Given the findings of Ross, we need a better understanding of the mechanisms through which democracies improve health and whether the "democracy" effect is universal.

Stasavage is more explicit about a mechanism through which democratization impacts social spending in his study of education spending in Africa: when rulers are faced with the need to garner an electoral majority in order to win or maintain office, they spend in ways that will assist with that goal, namely, in the provision of a universal public good.<sup>12</sup> This is particularly salient in contexts immediately following competitive elections.<sup>13</sup> Brown and Mobarak make explicit the link that in democracies politicians are compelled to favor

wider segments of the population, and they show that democratic governments increase the residential sector's share of electricity consumption (relative to industry's share).<sup>14</sup>

The threat of losing office incentivizes government to greater effort,<sup>15</sup> particularly towards more visible public goods provision.<sup>16</sup> The abolition<sup>17</sup> of primary school fees is one such "visible" good, especially when compared to other education inputs governments can choose to improve, such as hiring more teachers.<sup>18</sup> We argue UHC is another such "visible" good that a politician could use as a campaign promise (or instrument while in power) to generate broad electoral support.

Other scholars have also made the connection between electoral competition and health policy reform. Carbone studies Ghana before and after democratization and argues the political competition associated with democratization was the primary influence in the health financing reform process.<sup>19</sup> However, Carbone does not fully address the particular policy design choice: that of UHC rather than less ambitious and more selective or targeted approaches to health financing reform.

Before and after democratization swept much of the African continent in the 1990s, politicians often chose to target distribution of public goods and services (including those related to health), particularly to groups tied to the president's ethnicity.<sup>20</sup> We argue that true democratic competition, rather than more fragmented electoral competition, can induce political parties to adopt health policies that are more likely to target a broader portion of the population and are more universal in nature.

## DATA AND METHODS

### *Approach*

Like Stasavage, we expect electoral competition is a primary mechanism through which democracy impacts health policy choices (and ultimately, health outcomes). Our study does not test this theory directly but explores the conditions under which democracies adopt UHC. We compare three cases to illustrate the hypothesis that electoral competition affects UHC policy choice and explore the impact of public attitudes toward democracy on UHC policy choice.

To find evidence for the argument that public opinion and electoral competition, and not just the development of democracy itself, lead to policy aimed at a broader constituency, we compared sub-Saharan African countries in terms of their Polity 2 scores and selected countries that have experienced similar increases in levels of democracy over the same time period as Ghana, the anchoring country for our analysis. Using a 21-point scale ranging from -10 (hereditary monarchy) to +10 (consolidated democracy), the Polity 2 score captures the combined qualities of democratic and autocratic authority in governing institutions.<sup>21</sup> We excluded small island countries from the sample due to the small populations. Of the remaining countries, Kenya and Senegal were both countries in which multiple waves of Afrobarometer survey data was

collected and in which there were sufficient Demographic and Health Surveys (DHS) to make comparisons on outcomes over the relevant time period.

### *Data*

To compare the countries' democratic profiles we rely upon survey data from two different sources: the Afrobarometer and Gallup World Poll surveys, both of which measure public attitudes toward democracy. The Afrobarometer, a public opinion survey that draws nationally representative samples of adults in 20 African countries, provides data<sup>22</sup> that tracks satisfaction with democracy in Ghana, Kenya, and Senegal from 2002 to 2008.<sup>23</sup> In particular, we analyze responses to questions about satisfaction with how democracy works<sup>24</sup> and evaluations of the democratic nature of a country.<sup>25</sup> In our analysis of public satisfaction with health service provision, we also draw on data from Afrobarometer that asked respondents to evaluate government performance on improving basic health services.<sup>26</sup> We complement the Afrobarometer data with data from the 2011 wave of the Gallup World Poll, which conducted public opinion surveys with nationally representative samples in Ghana, Kenya, and Senegal.<sup>27</sup> The Gallup World Poll targets the entire civilian, non-institutionalized population aged 15 and older in the 130 countries where Gallup collects data. Samples are probability-based and nationally representative. There is a standard set of core questions used across the countries. We analyze data on confidence in government,<sup>28</sup> perceptions of government corruption,<sup>29</sup> and confidence in the honesty of elections.<sup>30</sup> Finally, we reviewed the published scholarly literature on elections in Ghana, Kenya, and Senegal, as well as country profile reports from the Economist Intelligence Unit to flesh out the electoral competition profiles of each country.

To measure health and health system improvements, we employed data collected in successive rounds of the Demographic and Health Surveys (DHS). The DHS are nationally representative surveys of reproductive-age women collected in developing countries on a regular basis.<sup>31</sup> The DHS uses very similar questionnaires across countries and across rounds of surveys, allowing cross-country comparisons of indicators and the analysis of trends in indicators. The indicators selected for comparison in this paper are commonly used measures of health service utilization and health outcomes, including whether or not births reported within the last three years of the survey were attended by a doctor or other health professional, whether or not births which took place within the last three years of the survey took place in a health facility, whether or not children aged 12-23 months had received all recommended childhood vaccines, and whether or not children born within the last three years who had suffered diarrhea within the last two weeks prior to the survey were treated with Oral Rehydration Therapy (ORT). The main health outcome variables utilized in this comparison were infant mortality rates and under-five child mortality rates.

## CASE COMPARISON OF GHANA, KENYA AND SENEGAL

### *Comparison of the evolution of democracy*

Though Ghana was the first sub-Saharan African country to achieve independence from its British colonizers and though it was originally a democracy, Ghana faced a series of coups and was authoritarian for much of its post-independence history. Scholars consider the transition to multiparty democracy in 1992 as the start of the democratic period in Ghana. A new constitution and multiparty elections, which were adopted in 1992, marked the beginning of the Fourth Republic, Ghana's current democratic regime.

On December 31, 1981 Jerry John Rawlings, a former military officer and charismatic leader, took power in Ghana through a coup. His party, called the Provisional National Defense Council (PNDC), was a largely left-leaning party. As part of the transition to multiparty elections in 1992, Rawlings officially retired from the military and formed the National Democratic Congress (NDC), which won the first multiparty election. The NDC ruled Ghana from 1992-2000.

Elections are held every four years in Ghana. Since the establishment of multi-party elections, only two major political parties have had any real probability of winning the presidency: the NDC, which although still left-leaning is more accurately described as a center-left party, and the New Patriotic Party (NPP), the center-right party. In 2000, the NPP narrowly defeated the NDC leading to the first change in power in Ghana that has come through electoral defeat. John Agyekum Kufuor took over the Presidency of Ghana in early 2001. Two elections later in 2008 the NDC, now led by John Evans Atta Mills, the former Vice-President of Ghana during the Rawlings Presidency, narrowly defeated the NPP to once again claim the Presidency in Ghana. The 2000 and 2008 presidential races were so close that in both years runoff elections were held because no candidate won 50% of the vote in the first round.

Although ethnic and tribal considerations are important in Ghana, voting patterns in Ghana do not fall exclusively along ethnic or tribal lines. Rawlings is half Ewe and half Scottish. The NDC party, which was formed by Rawlings in 1992, has benefited from the loyal support of the Ewe and the Volta Region from which Rawlings hails.<sup>32</sup> Historically, the Ghanaian intellectual and business elite have come from the Ashanti area. The NPP emerged from this region and therefore has maintained relatively loyal support from the Ashanti region as well as from the Eastern Region.<sup>33</sup> However, outside of these strongholds, populations are more heterogeneous, being composed of Ashanti, Ewe, Ga, and other ethnic groups such as the Fanti. These ethnically diverse areas have experienced relatively strong electoral competition.<sup>34</sup> Whitfield argues the *de facto* two-party system in Ghana has allowed parties to cut across social cleavages such as ethnicity and create institutional networks in all regions of the country.<sup>35</sup> In sum, Ghana has been heralded as an exemplary democracy that other transitional democracies should aspire to replicate.<sup>36</sup>

Kenya was predominantly a one-party state following independence in 1963 and transitioned to a multi-party system in the 1990s. Daniel Arap Moi of

the Kenya African National Union (KANU) party ruled Kenya from 1978 until 2002, when the constitution barred him from running again. His hand-picked successor, Uhuru Kenyatta, lost the election and the presidency was – for the first time since independence – ruled by someone outside of KANU: Mwai Kibaki, the presidential candidate of the National Rainbow Coalition, which was a combination of the Liberal Democratic Party and the National Alliance of Kenya. Though some date Kenya's democratization process to have started with the advent of *de facto* multipartyism in the 1990s, other scholars debate this date given that it was not clear that Moi or KANU would concede victory to the opposition. This further strengthens the importance of the 2002 elections in Kenya's democratization process.

Ethnic ties are significant in contemporary Kenyan politics. The ethnic violence surrounding the 2007 elections is an obvious example of how some ethnic boundaries in the country also map onto political divisions.<sup>37</sup> Ethnopolitical divisions that erupted into violence in the 1990s were “forerunners” of the 2007 election violence, demonstrating a history of the salience of ethnic division rather than an original, isolated incident.<sup>38</sup> The 2007 election irregularities and subsequent violence has further deteriorated the already low levels of trust and social capital across ethnic groups.<sup>39</sup>

Though a recent Economist Intelligence Unit Country Profile of Kenya gives the country relatively high marks on the political participation component of its democracy index, the editors caution, “Healthy participation is undermined by the significance of ethnic allegiances in Kenyan politics and the disproportionate power wielded by dominant tribes.”<sup>40</sup> A new constitution, approved by referendum in 2010 by a two-to-one margin, calls for greater devolution of power, a new anti-corruption agency, and an independent land commission; the hope is that following the implementation of the new constitution, the issues undergirding ethnic tensions in Kenya will be addressed.<sup>41</sup>

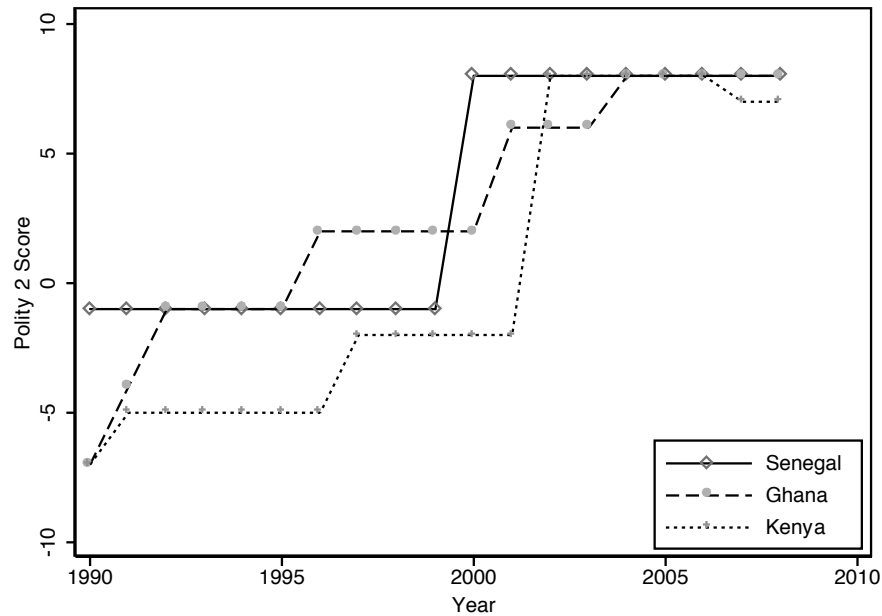
Following independence from France in 1960, Senegal was dominated by a single party, the Parti Socialiste du Sénégal (PSS), originally led by the founding president Léopold Senghor. When Senghor retired in 1981, he handed over power to his deputy, Prime Minister Abdou Diouf. The quasi-single party rule came to an end in 2000 when the incumbent Diouf lost the election to Abdoulaye Wade, the presidential candidate of the Parti Démocratique Sénégalais (PDS). Wade won reelection in 2007 but lost his bid for a third term in March 2012 and peacefully transferred power to Macky Sall, who ran as a member of the Alliance pour la République (APR) party.<sup>42</sup> Thus, like Ghana, Senegal has experienced two peaceful transfers of power in the contemporary democratic period. However, elections in Senegal have not been as competitive as those in Ghana. Wade won the 2007 election by a margin of 41% and lost the 2012 election by a margin of 31.6%.

Ethnic division is not prominent in Senegalese politics,<sup>43</sup> though the conflict in the Casamance region has sometimes been interpreted through an ethnic or religious lens. More than 90% of Senegal's population is Muslim. The largest ethnic group in Senegal is the Wolof (43% of the population) and the next largest is the Peuhl (24%). Political parties have not formed along ethnic lines,

though are characterized as elitist.<sup>44</sup> The most recent Economist Intelligence Unit Country Profile of Senegal characterizes political participation as weak because of low literacy rates, high poverty, and the lack of women’s involvement in political life.<sup>45</sup>

Thus, all three countries examined in this case comparison have undergone the transition to single-party to multi-party elections over roughly the same time periods. The democratization of Ghana, Kenya, and Senegal from the 1990s to the current period is illustrated in Figure 1, which tracks the Polity 2 Score from the Polity IV dataset.<sup>46</sup> All three countries began the 1990s with a Polity 2 score below 0, indicating higher levels of autocratic institutions than democratic institutions. The figure shows countries ending with Polity 2 Scores of 8 (Kenya reverts to 7 in 2007 and 2008), indicating higher levels of democratic institutions than autocratic institutions. The tentative 2010 Polity scores suggest similarity as well, with Ghana and Kenya both scoring an 8 and Senegal at 7.<sup>47</sup>

Figure 1: Level of Democracy in Ghana, Kenya, and Senegal 1990-2008

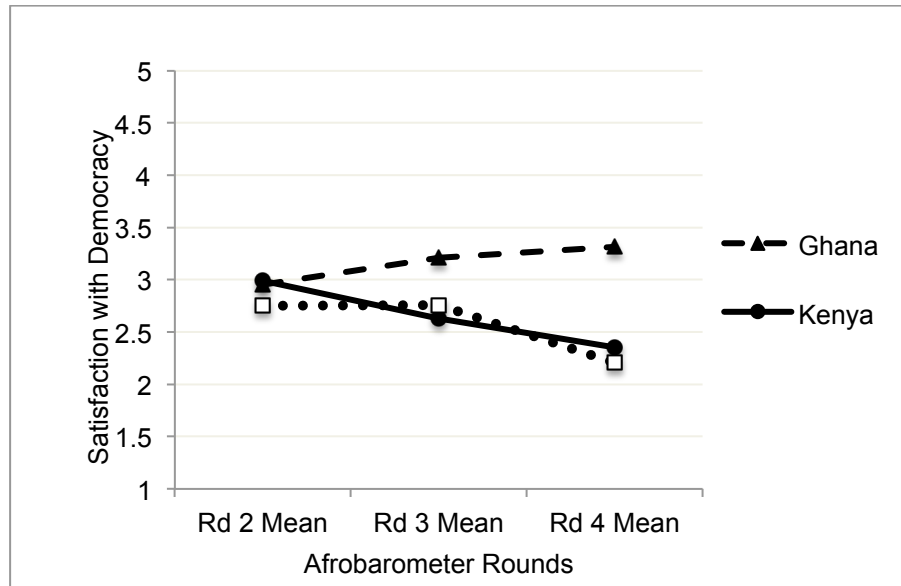


*Comparison of electoral competition and public perception of democracy*

Using a 5-point scale ranging from 1 (very unsatisfied) to 5 (very satisfied), Figure 2 illustrates the average level of satisfaction with democracy in each of the countries in Rounds 2, 3, and 4 of Afrobarometer data collection. All three countries started roughly at the same point in Round 2, when Kenya’s average satisfaction with democracy score was 2.98, Ghana’s 2.95, and Senegal’s 2.75. Over time, however, we see a decline in the satisfaction with democracy in both Kenya and Senegal, and a slight rise in the average Ghanaian’s satisfaction with democracy.

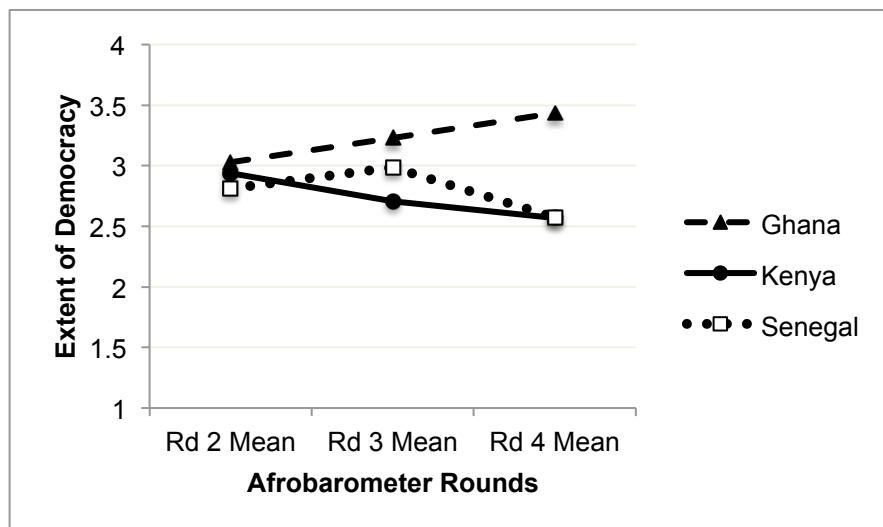


Figure 2: Satisfaction with Democracy in Ghana, Kenya, and Senegal, Afrobarometer Rounds 2-4



Regarding the extent to which Afrobarometer respondents think their country is a democracy, the response pattern over time is similar to the question about satisfaction with democracy. On a scale of 1 (not a democracy) to 4 (a full democracy), all three countries cluster around the same point during Afrobarometer Round 2; Ghana has a mean of 3.0, Kenya has a mean of 2.9, and Senegal has a mean of 2.8. Over time, however, we see a divergence (see Figure 3). By the time Afrobarometer collected Round 4 data, Ghanaians' average opinion on the extent of democracy in their country had improved (mean of 3.4), while the average opinion in both Senegal (mean of 2.6) and Kenya (mean of 2.6) declined.

Figure 3: Extent of Democracy in Ghana, Kenya, and Senegal, Afrobarometer Rounds 2-4



Gallup World Poll data from 2011 indicate more Ghanaians (68%) reported having confidence in their government than Kenyans (46%) or Senegalese (30%). Though belief that government was corrupt was a majority opinion in all three countries, this opinion was more prevalent in Kenya (96%) and Senegal (89%) than in Ghana (82%). Perhaps the most relevant indicator from the Gallup World Poll is a question that asked about the honesty of elections. In Ghana, 75% of the surveyed population thought elections were honest, while only 36% of Senegalese and 27% of Kenyans thought elections were honest.

In sum, nationally representative samples surveyed by two different public opinion outfits show far more variation in democratic indicators between Ghana, Kenya, and Senegal than the overall Polity scores would suggest. Judging from the public opinion data, Ghana is perceived to be the most democratic of the three countries by regular citizens, and by a significant margin.

A cornerstone of democracy is the institution of free and fair elections. Though all three countries have held elections since gaining independence, only in the 1990s did Ghana, Kenya, and Senegal all have true multiparty competition. It was not until the 2000s, however, that these countries also experienced alternations in power, meaning a peaceful transfer of power from one political party to another in ruling the presidency. In 2000, Senegal's long-standing ruler Abdou Diouf (of the PSS) lost his re-election bid and handed over the presidency to Abdoulaye Wade (of the PDS). In Ghana in 2000, the hand-picked successor to Jerry Rawlings, John Atta Mills (of the ruling NDC party), lost to John Kufuor (from the opposition NPP) and power was peacefully transferred to Kufuor in 2001. Kenya's election in 2002 of Mwai Kibaki (of the National Rainbow Coalition) ended decades of rule by the KANU party, after the loss of outgoing President Daniel Arap Moi's hand-picked candidate, Uhuru Kenyatta, and again, the handoff of power was peaceful.

The trend of competitive, free and fair elections followed by peaceful alternation in power continued only in Ghana. In Ghana's 2008 election judged by international and domestic observers as free and fair, the opposition won by only a narrow margin (of less than one percent), but the ruling party conceded defeat and handed over power.

In contrast to the Ghanaian experience, Kenya's 2007 election was followed by violence that resulted in over 1,000 deaths and the displacement of an estimated 350,000 people. Though polls preceding the election showed a close race where the opposition candidate Raila Odinga would defeat the incumbent president Mwai Kibaki,<sup>48</sup> the Electoral Commission of Kenya declared Kibaki the winner, stating he won 46.4% of the vote while Odinga only garnered 44.1% of the vote. International and domestic election observers described the election as flawed.<sup>49</sup> Analysis of exit poll data against officially reported election returns show discrepancies beyond margins of error.<sup>50</sup> The alleged fraud associated with the ballot counting and the violence surrounding the 2007 elections precipitated the drop in Kenya's Polity score seen in Figure 1.

Senegal also held elections in 2007. Though opposition parties protested the outcome of the presidential election, electoral observers declared the balloting sufficiently free and transparent.<sup>51</sup> The incumbent, Abdoulaye Wade,

won 55.9% of the vote in the first round; the nearest challenger, Idrissa Seck, won only 14.9% of the vote. Wade lost his bid for a third term in March 2012, having only received 34.2% of the votes in the second round, while winner Macky Sall won 65.8% of the vote. Though Senegal's 2007 and 2012 elections had no violence or sufficient tampering to have altered the outcome, the results – particularly the wide margins of victory – demonstrate the absence of real competition.

The election in Senegal was not competitive like that in Ghana, where as the election in Kenya was competitive but was not free and fair. So, unlike the overall Polity scores, and more consistent with the public opinion data, analysis of recent elections in Ghana, Kenya, and Senegal show variation in the democracies. In particular, the elections demonstrate that only in Ghana were politicians faced with real uncertainty about who would win office. Because of the genuine competitive nature of politics in Ghana's democracy, it is unsurprising that Ghana, and not Kenya or Senegal, has chosen to pursue UHC, a policy that would garner broad electoral support. Senegal's Wade, faced with weak opposition, had little incentive to pursue a policy that would attract more voters (he had a sufficient number of voters already). Kenya's Kibaki, having decided the outcome irrespective of the actual election results, also lacked incentive to pursue a policy with universal benefits: if you can rig the election, what does it matter what policy would benefit voters?

### *Comparison of health reform process*

Due to a combination of changing economic conditions and increasing role of international actors in influencing health priorities in developing countries, most countries in sub-Saharan Africa adopted some sort of user-fee system in either the late 1980s or early 1990s.<sup>52</sup> Although it was realized that user-fees were likely to disproportionately affect lower income patients, such policies were adopted on the basis of the need to raise financial resources for health service delivery, to improve the quality and availability of commodities, and to promote the sustainability of health systems. In theory, most countries also adopted some sort of exemption policy to exempt low-income patients from these user-fees. In practice, most of these exemption policies were poorly implemented and essentially non-functional.<sup>53</sup>

Beginning in the late-1990s, there was a growing recognition of the need to implement alternative financing schemes. Although user-fees were ubiquitous, these policies were unpopular in many countries and at the same time, health indicators were not seen to be sufficiently improving in most countries. International partners and developing countries alike became more interested in the idea of implementing some form of health insurance system to expand financial protection and increase health service utilization, in particular among the poor.

At the time, many developing countries already had some form of Social Health Insurance scheme in place but where such schemes existed they provided protection mainly to civil servants and other formal sector workers.<sup>54</sup> Community Based Health Insurance schemes (CBHIs) were also put forward as potential

solutions for developing countries. CBHIs, frequently supported by international donors, were piloted and implemented in numerous developing countries, such as in Ghana, Senegal, and Kenya.<sup>55</sup> The perceived advantages of these programs were that in countries where government implementation was weak, local oversight of insurance schemes might improve the chances of success. However, such schemes remained small scale and did not provide coverage to large portions of the population, and the broader impact of these schemes on improving health service delivery was never well established.

The first President of Ghana after achieving independence from Britain was Kwame Nkrumah, who was a socialist and a populist. Under his leadership, which coincided with a period of relatively strong economic growth, the Nkrumah government put strong emphasis on expanding geographic coverage of health services to Ghanaians, including constructing health facilities in largely rural areas.<sup>56</sup> Health service expansion was rapid and basic health services were made free of charge to citizens.

However, during the 1970s the economic climate in Ghana changed dramatically with major declines in the price of important commodities, and the government began to suffer serious economic strain. Beginning in the mid-1970s, the government began to introduce new policies that gradually increased the level of cost-sharing by patients in public health facilities. International partners encouraged this process, even demanded it through the structural adjustment policies that aimed to lessen the burden on government for public services. In 1985, the Government of Ghana (GoG) introduced a system of user-fees to improve revenue generation at the facility level. Known informally as the “cash-and-carry” system, the user-fees introduced in Ghana generally represented very high levels of cost-recovery, covering both inpatient and outpatient health services as well as pharmaceuticals and other medical supplies.<sup>57</sup> While exemptions existed *de jure* in Ghana for certain populations, including those too poor to pay for health services, the *de facto* implementation of these exemptions was low.<sup>58</sup>

Although user-fee policies remain in place today, the cash-and-carry system became and remains an unpopular policy in Ghana. During the 1990s, the focus of the health financing policies of the NDC government was to expand geographic coverage of health services and to improve the efficiency of health service delivery.<sup>59</sup> These policies include the further expansion of health facilities into rural areas and the separation of health stewardship and regulation from health service delivery through the creation of the Ghana Health Service in 1996. Despite these improvements, the proportion of the population accessing health services did not improve markedly. The lack of financial protection against user-fees was seen as a major barrier.<sup>60</sup>

During the 1990s, the Ministry of Health (MoH) began a series of pilot studies to investigate the potential of CBHIs as a method of improving access to health services.<sup>61</sup> It even created a dedicated unit within the MoH to further study such efforts. It was the NDC itself, which initially introduced this policy, who first began to make statements to address and reverse the policy on user-fees in 1997.<sup>62</sup> However, despite this and the experiments that had been underway, the NDC did not introduce any formal policy to address the issue directly.

Capitalizing on the lack of inaction by the NDC, and recognizing the unpopularity of the cash-and-carry system, during the run-up to the 2000 election, the NPP promised to eliminate user-fees. While the NPP managed to secure a narrow victory over the NDC in 2000, it was not until the run-up to the following election in 2003 that the NPP fully elucidated its policy on user-fees. Initially it had put together a working group of largely technocrats with expertise in health system financing and health service delivery to develop the national health insurance policy that would replace user-fees. The group initially recommended continued expansion of existing CBHIs. Seeing these policies as too incremental and not distinctly different from the policies endorsed by the opposition party, the NPP rejected this proposal. It then dismissed the first working group and established a second working group to devise a new workable solution.<sup>63</sup> This committee was largely composed of political rather than technical experts, many of whom had been involved in the successful campaign in 2000 to unseat the NDC from power. This working group proposed a plan that outlined what was to become the NHIS today.<sup>64</sup>

The original design of the NHIS included some features that were unconventional from a health policy and health systems financing perspective. First, rather than scale-up the program incrementally, the proposal was to scale-up the program rapidly with the target of achieving universal coverage of the population in just five years. Also, rather than covering particular diseases or target populations, the plan called for universal coverage and a benefits package that covered nearly the entire disease burden present in the country. Finally, rather than pricing the premiums for enrollment based on some actuarial models, the initial premium of GHC7.20, then approximately \$8USD, per person per year, was set in order to appeal to as broad of a sector of the population as possible, including those living in rural areas.<sup>65</sup>

To finance the ambitious program, the NPP proposed expanding the VAT by 2.5 percentage points to become what is known as the NHIS levy. Formal sector workers, including members of the Social Security and National Insurance Trust, were also forced to enroll into the program, bringing along with them their payroll deductions. In essence, this financing model is a mixture of both social health insurance as well as tax-financed system, superficially with a dedicated new tax, a model that had not been tested in many other developing countries.

There was opposition to the original policy from both the formal labor sector, which ultimately were going to be forced to merge into this new scheme, as well as health care providers.<sup>66</sup> Despite protests and the NDC walking out of parliament during the discussion of the bill, the NPP pushed through legislation at the end of 2003 that laid the groundwork for the NHIS. According to statistics from the National Health Insurance Authority, by the end of 2010, there were over 8 million active subscribers to the NHIS, which represents roughly 34% of the entire Ghanaian population.<sup>67</sup> Coverage in the various regions in Ghana ranged from 23% in the Central Region to 53% in the Upper West Region. Although the program has yet to obtain universal coverage, these increases represent important increases in health insurance coverage in this country.

Although the NHIS was the most prominent health financing reform to have been implemented in Ghana, it was not the only one to have taken place

during this time period. Other prominent policy changes included the implementation of a free maternal health program in Ghana, which was first implemented in 2003 in four regions and subsequently rolled out to the rest of the country in 2005. The program was subject to a number of implementation challenges and was essentially made non-functional by the establishment of the NHIS.<sup>68</sup>

Although discussions regarding the implementation of universal or national health insurance have been underway for well over a decade, such a program does not yet exist in Kenya. As early as 2001, then-President Moi announced an expansion of the program to cover all formal workers in addition to providing coverage to the poor.<sup>69</sup> However, it was not until 2004 that the Kenyan Parliament passed the National Social Health Insurance Fund (NSHIF) Bill in Parliament. The goals of this program were ambitious: to provide universal coverage of the entire Kenya population within nine years. The President, however, has yet to assent to this bill and has sent it back to Parliament for further debate due to concerns about the costs of the program.<sup>70</sup> Although renewed debate on the establishment of the NSHIF is expected soon in Kenya, no formal plan is yet in place to adopt such measures.

Some coverage of health insurance has existed in Kenya since nearly the time of Independence. The National Hospital Insurance Fund (NHIF) was passed by Parliament in 1966. The NHIF is mandatory for all civil servants and formal sector workers, and voluntary for informal workers and retirees. Voluntary premiums are 300 Ksh per enrollee per month (about \$3). Formal sector workers pay a share of their income, which can range from 150-2000 Ksh per enrollee per month (\$2-24).

The NHIF currently only covers inpatient costs at select government hospitals. Roughly 300 hospitals have contracts with the NHIF. The plan also covers the dependents of enrollees including children under the age of 18 and the spouse. As of 2010, roughly 2 million Kenyans contributed to the fund that then had roughly 8 million covered individuals.<sup>71</sup> There are also limited private and CBHIs in Kenya but these schemes cover less than 1% of the total population.<sup>72</sup>

In the absence of health insurance coverage, the main methods of health care financing include tax-based contributions from government and user-fees. Like many African countries, Kenya introduced a user-fee system in the late 1980s. The premiums were unpopular and were abolished in 1990, only to have them reinstated two years later due to lack of financing for the program.<sup>73</sup> In 2004, the Ministry of Health once again announced that user-fees would be free at dispensary and health center levels, but would require citizens to pay a small fee to register at these facilities. In 2004, user-fees at dispensaries and health centers were replaced with flat consultation fees of 10 Ksh (US\$0.13) and 20 Ksh (US\$0.26) respectively.<sup>74</sup> Despite these changes, inability to pay remains a major complaint among citizens in Kenya, suggesting that removal of these fees has been ineffective.

Efforts to improve health care financing and health service delivery in Kenya can perhaps more accurately be described as targeted to specific services and to specific populations. For example, starting in 2006 and with the support of the German Development Bank, the Ministry of Planning began to support a

pilot to provide vouchers for maternal health care and family planning in select districts in Kenya (Kitui, Kiambu, Kisumu, and parts of the slums of Nairobi). Despite being described as a pilot program, these pilots are still ongoing and have so far benefitted upwards of 120,000 people.<sup>75</sup> Additionally, in November 2008, the Government of Kenya launched a voluntary medical male circumcision program to expand access to male circumcision where the percentage of men who are circumcised is low and the prevalence of HIV is high. The government targeted Nyanza, Western, Rift Valley, and Nairobi provinces. A speech by Kenya's Prime Minister Raila Odinga (who hails from Nyanza province) was integral in support for the program.<sup>76</sup>

Starting in the 1990s and under the auspices of the Bamako Initiative, Senegal also introduced a system of user-fees for health services. Small user-fees for primary care services were implemented at government health structures and higher fees were implemented for services delivered at secondary and tertiary facilities.<sup>77</sup> By the 2000s, financial constraints were seen as important barriers to the use of health services. Rather than adopting an across-the-board policy of eliminating or abolishing user-fees, starting in 2005 the government introduced a policy of free deliveries and caesarean sections (PFDC) to exempt pregnant women from user-fees for maternal health services. The PFDC was initially rolled out to 5 of the poorest regions in the country. The PFDC exempted all women from paying for normal deliveries taking place at health posts and health centers and for complicated births requiring caesarean sections at district and regional hospitals. The funding mechanism included the purchase of birth kits for facilities for normal deliveries and financial reimbursement to facilities for caesarean sections. Other complications were not covered. About a year later, the PFDC was rolled out to the remaining regions, with the exception of Dakar, which was never covered under this program. Although the PFDC has been generally believed to have led to small improvements in maternal health-seeking behavior, the program has not been without important implementation challenges.<sup>78</sup> The level of resources allocated to this program was seen as inadequate.

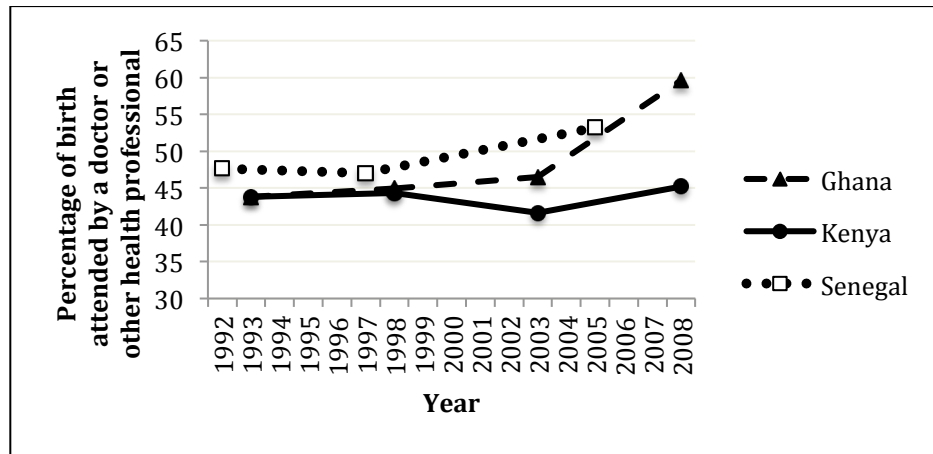
Senegal has also seen the development of numerous CBHIs. The first such scheme originated in the 1990s in the Western part of the country near the capital of Dakar.<sup>79</sup> While there has been substantial expansion of CBHIs throughout the country, there has yet to be any major efforts to organize or consolidate these schemes into a more national health insurance plans.

### *Comparison of health improvements*

Given the divergent health financing reforms adopted by the countries of study, it is reasonable to expect that these health reforms might translate into different levels of improvement in health service utilization and in health outcomes. Using data from successive rounds of the DHS, we compared changes in common indicators of health service utilization and health outcomes in Ghana, Kenya and Senegal. All three countries have conducted at least three rounds of DHS since the early 1990s, allowing a comparison of trends in the utilization of services and health outcomes performance.

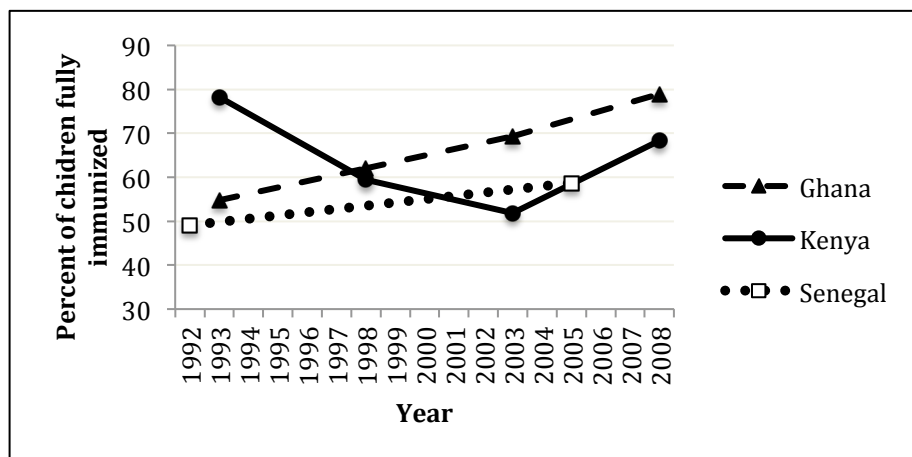
Figure 4 illustrates the trends in skilled birth attendance across the three studied countries. We see initially that skilled health professionals attended about half of all births during most of the 1990s in all three countries. However, by the mid-2000s the country trends diverge markedly with Ghana seeing a nearly 15-percentage point increase in skilled birth attendance between 2003 and 2008. Senegal saw a modest increase whereas Kenya's rates have remained nearly flat over the entire time period.

Figure 4: Skilled Birth Attendance in Ghana, Kenya, and Senegal 1992-2008



Trends in the proportion of children who received all recommended childhood vaccines are presented in Figure 5. In the 1990s, Kenya had much higher rates of coverage than either Ghana or Senegal but regressed in the early 2000s, seeing declines in coverage of nearly 30 percentage points. Immunization rates in Ghana and Senegal, however, were both increasing over this time period with Ghana achieving substantially higher overall rates by 2008. Immunization rates in Ghana increased nearly 30 percentage points over the available time period.

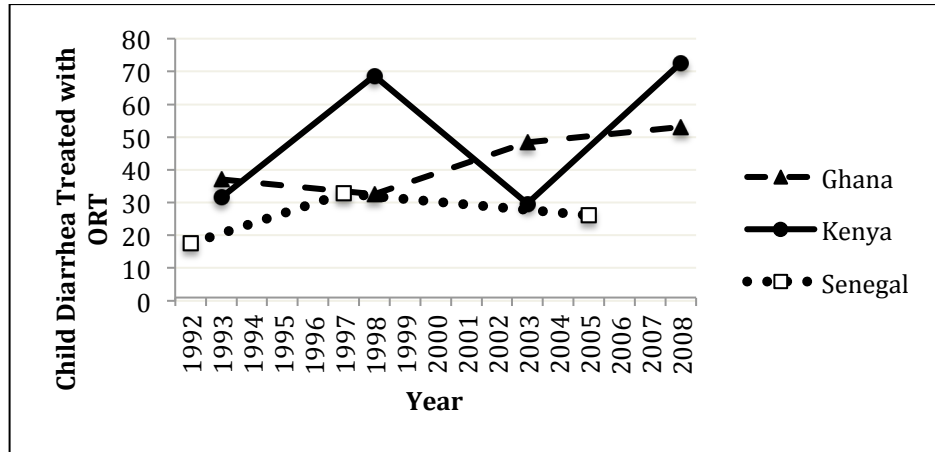
Figure 5: Child Immunization in Ghana, Kenya, and Senegal 1992-2008





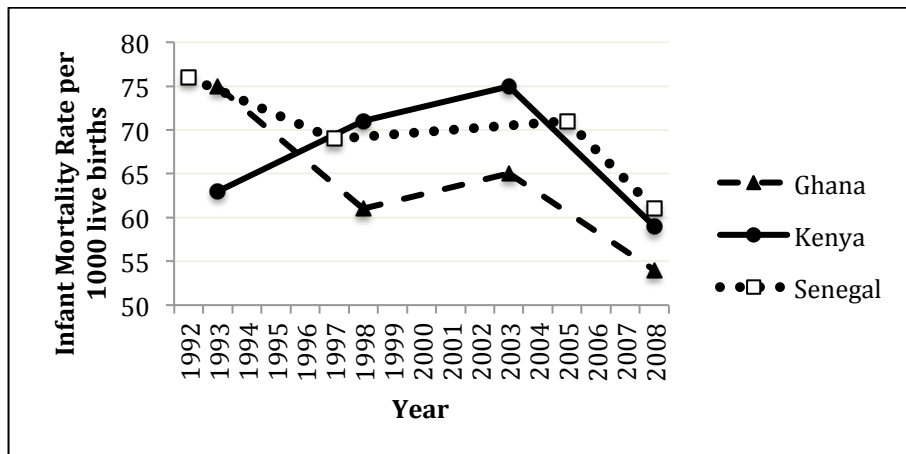
Among children who were reported to have diarrhea within the two weeks preceding the DHS, the proportion of children who reportedly received ORT are presented in Figure 6. While the reported trends in Kenya are erratic and highly variable over this time period, both Ghana and Senegal show modest increases in the proportion of children receiving treatment. Ghana shows the most overall improvement during this time period.

Figure 6: Child Diarrhea Treated with ORT in Ghana, Kenya, and Senegal 1992-2008



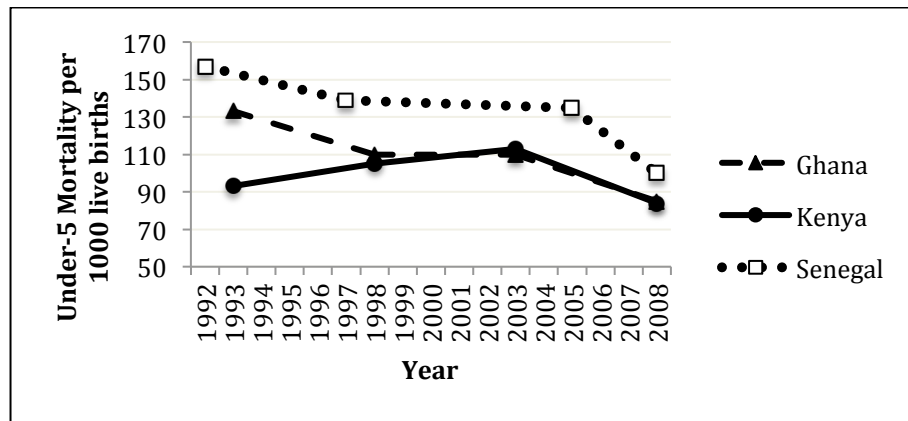
Finally, the impact of these changes in health services utilization on both the infant and under-five child mortality rates are presented in Figures 7 and 8. Although both Ghana and Senegal had much higher levels of infant mortality rates than Kenya during the beginning of the 1990s, both see significant declines in infant mortality over this time period, with Ghana performing slightly better than Senegal. Kenya actually sees increases in infant mortality over this time period before returning to levels slightly improved to those experienced nearly two decades earlier.

Figure 7: Infant Mortality Rate in Ghana, Kenya, and Senegal 1992-2008



We see similar trends when under-five mortality rates are compared in these three countries. Both Ghana and Senegal see gradual progress towards reducing child mortality over the investigated time period; Kenya sees declines in progress before once again catching up to levels seen nearly two decades earlier. Ghana sees the most impressive proportional decline in under-five mortality rates among the three countries investigated.

Figure 8: Under-Five Child Mortality Rate in Ghana, Kenya, and Senegal 1992-2008



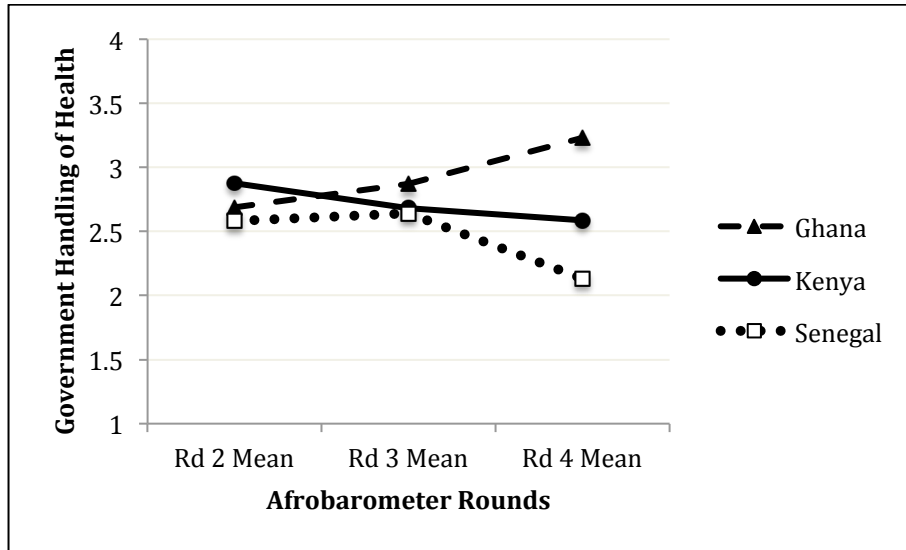
Comparing maternal and child health service utilization data as well as health outcomes in these three countries, Ghana appears to have made the most significant and consistent improvements over the past two decades. Although not all of these improvements can be directly attributable to changes in health system financing, given that there have also been significant changes in the economic performance and educational attainment in these countries over the same time period, there is evidence that the implementation of the NHIS has increased the utilization of health services and likely affected health outcomes directly.<sup>80</sup> For example, the biggest improvements in skilled birth attendance appear to coincide directly with the implementation of the NHIS in Ghana. The greatest proportional drop in infant mortality rates also appears to have coincided with the implementation of the NHIS.

*Comparison of public satisfaction with health service delivery*

Given the differences in health policy choice and subsequent health outcomes, we probed the Afrobarometer data for patterns on evaluations of government provision of health. In particular, we analyzed public opinion on the government’s performance in improving basic health services. Using a 4-point scale ranging from 1 (very badly) to 4 (very well), Figure 9 illustrates a divergence in performance over time across the three countries. In Round 2 of Afrobarometer data collection, all three countries had an average score of 2.5-2.9. By Round 4, however, the average score given to government by ordinary Ghanaians has improved (mean 3.2), while the average score given to

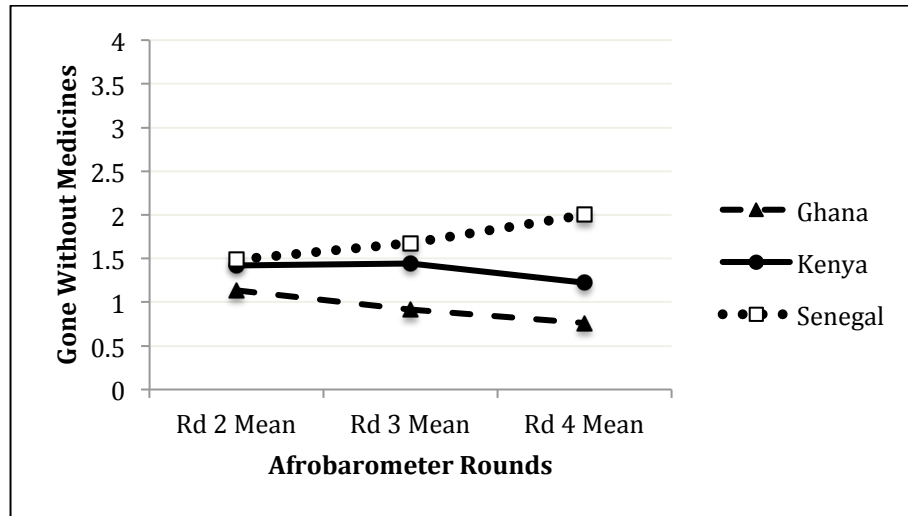
government by ordinary Kenyans and Senegalese has declined (means 2.1 and 2.6, respectively).

Figure 9: Evaluation of Government Performance on Improving Basic Health Services in Ghana, Kenya, and Senegal, Afrobarometer Rounds 2-4



A related Afrobarometer question shows a similar pattern, but perhaps with weaker substantive differences between countries. Respondents were asked whether they or anyone in their family had to go without medicines or medical treatment in the past year.<sup>81</sup> This question is not explicitly about the government, but provides some illustration as to the constraints ordinary people have in accessing care. In a situation where governments provide wider, cheaper access to care, we might expect fewer respondents reporting having to go without care, which is consistent with the data: we find that fewer Ghanaians reported going without medicines or medical care in the previous year in all three rounds of Afrobarometer when compared to their counterparts in Kenya and Senegal (see Figure 10). The trend line declines in Ghana, meaning over time, fewer respondents reported going without medicines or medical care (Round 2 mean: 1.1; Round 3 mean: 0.9; Round 4 mean: 0.8). Senegalese reported going without medicine or medical treatment more frequently, and this increased over time (Round 2 mean: 1.5; Round 3 mean: 1.7; Round 4 mean: 2.0). Kenya held steady between Rounds 2 and 3 (means of 1.4), but the reports of going without medicine or medical care decreased in Round 4 (mean of 1.2).

Figure 10: Reports of Going Without Medicines or Medical Treatment in Past Year in Ghana, Kenya, and Senegal, Afrobarometer Rounds 2-4



**DISCUSSION AND CONCLUSION**

While the previous literature that has explored the link between democracy and health has suggested that more democratic countries tend to be healthier and provide better access to health services, there is little agreement on the exact mechanisms through which democratization leads to improved health outcomes. The findings of this paper suggest one potential mechanism: that countries where democratization has occurred, and specifically where these improvements in democracy have been perceived by citizens as giving them a voice and where electoral competition has put pressure on political parties, these countries are more likely to promise health policies that target a broader segment of the population. Comparing Ghana to Kenya and Senegal, two other countries which have also undergone democratization, but where there have been important differences in the extent to which these democratic changes have been perceived by regular citizens and have translated into electoral competition, we find that Ghana has adopted the most ambitious health reform strategy by designing and implementing the NHIS, seemingly against major challenges. We also find that Ghana experienced the greatest improvements in rates of skilled attendance at birth, increasing by nearly 15 percentage points since the introduction of the NHIS. Childhood immunizations also increased by nearly 30 percentage points, and there were improvements in the proportion of children with diarrhea treated by ORT. These changes in health service utilization also appear to have translated into changes in health outcomes: both infant and under-five mortality rates declined rapidly since the introduction of the NHIS in Ghana. These improvements in health and health service delivery have also been observed by citizens, with a greater proportion of Ghanaians reporting satisfaction with government handling of health service delivery relative to either Kenya or Senegal.

Our analysis is undergirded by an argument that the visibility of the provision of a benefit is what will generate support in the electorate, motivating a politician to choose such a policy if he wishes to gain or stay in office. We argued UHC is one such visible policy, however, there is another, fruitful lens through which UHC can be viewed: the distinction between provision and retrenchment. Policies of provision are popular, especially in developing countries where populations cannot typically afford to pay out-of-pocket for services. Retrenchment policies, on the other hand, would be rather unpopular for the same reason. We see these scenarios borne out in healthcare financing with the introduction of user fees during the structural adjustment period and also with the introduction of UHC in Ghana. Though provision and retrenchment seem to be opposing strategies, their enactment would not necessarily generate equivalently opposite reactions in the electorate if we consider the relevance of loss aversion, where losses hurt more than gains feel good.<sup>82</sup> Future research could explore this distinction vis-à-vis the visibility hypothesis.

One methodological contribution of our study is a caution against using only a single measure of democracy to make comparisons across countries. We used the Polity 2 score to identify countries for our case selection, however, a closer examination of different indicators of democracy reveal a more varied democratic evolution in these countries. These other measures (public perception of democracy and electoral competition) appear to predict the adoption of more universal health policies and greater improvements in health indicators than the Polity 2 score.

Given our findings, how should we think about published scholarship that used Polity data to measure democracy in studies predicting health policies or evaluating health outcomes? Future research could reanalyze published studies that used Polity data<sup>83</sup> and substitute Polity measures with measures on election competitiveness and public attitudes toward democracy. The primary challenge would be amassing data, especially for cross-national studies. In addition, there may be other useful data measuring democracy (beyond electoral competition and public attitudes) that have yet to be identified as indicative of the mechanisms through which democracy impacts health.

Though our findings have potential implications for other government policy sectors (i.e., education), Kramon and Posner caution against too much generalization from the analysis of one public goods outcome given that governments have an array of public goods and services about which politicians can make different sets of choices that are still consistent with the overall goal to maintain power.<sup>84</sup> Future research could evaluate multiple universal policy choices to adjudicate whether our findings on the influence of perceived democracy and electoral competition on UHC choice in Ghana is consistent across sectors. Simply put, did Ghana also more aggressively pursue policies with universal benefits in education or electrification when compared to Kenya and Senegal?

Though this paper's contribution is primarily to the literature on how democracy can improve health outcomes, it raises questions for future research to investigate the relationship in the opposite direction: how does increasing access to care and subsequent improvement in health outcomes contribute to

democratic consolidation? Given our findings on evaluation of government health services, we took a preliminary look at Round 4 Afrobarometer data to assess whether evaluations of government provision of basic health services helps explain some of the variation in support for democracy. In each of the three countries studied here, but with a larger substantive effect in Ghana than in Kenya or Senegal, we found that more positive evaluations of government health care predict higher support for democracy (not shown). This is consistent with other scholarship that suggests that citizens of countries with higher levels of technical health service quality also have more trust in government.<sup>85</sup> Does the improvement of social services lead to greater demands for social services and the citizenry holding government accountable to those demands? If so, what are the mechanisms through which increased service provision leads to increased demand and accountability? Related to the aforementioned question about government substitution between different policy areas, does increased and improved provision of state-sponsored health care lead to a demand for increased and improved provision of other public goods and services, i.e., public education?

Given that developments in democracy occurred before the adoption of UHC in Ghana, our findings might also suggest that it might be necessary for institutional developments to occur prior to the adoption of effective health reforms. There is currently a strong movement among the global health policy community to advocate for more developing countries to move towards UHC coverage.<sup>86</sup> But such efforts might be inefficient or misguided if countries are unlikely to implement successful programs in the absence of strong democratic institutions. Instead, nationally led efforts to improve government might be more important for future health policy reforms than internationally led efforts to advocate for further expansions of such coverage.

We conclude with a discussion of the recent national elections in Ghana, Kenya, and Senegal. In Ghana, President John Atta Mills died in office in July 2012, just four months before the presidential election. Mills was succeeded in office and as the NDC candidate for president by his former Vice-President John Dramani Mahama, who narrowly beat out Nana Akufo-Addo from the NPP in the November 2012 election. The NPP has accused the NDC of tampering with the votes and while the election results stand, there has been an ongoing legal challenge of the election results. In Kenya, due to new constitutional rules, incumbent President Mwai Kibaki was unable to run in the election, however, his successor Uhuru Kenyatta was narrowly elected. The opposition party has also challenged the results of this election and there was some conflict in the lead up to the election, though not of the scale seen in 2007. In Senegal, the incumbent President, Abdoulaye Wade once again stood for President, after the Supreme Court deemed Wade's first term to have not counted, an action that led to significant protests in the run up to the election (Senegal's constitution states a two-term limit for Presidents). Although Wade was leading after the first round of voting, Wade lost the election to Macky Sall in the second round and then accepted the outcome of the election leading to the first turnover in power in Senegal in over 30 years.

While it is too soon to know what the outcomes of these elections will mean for the future of UHC in these countries, the argument we set forth in this

paper would suggest the increased democratic competition in Senegal will likely lead to a greater number of citizens there having positive opinions about the nature of democracy and will put pressure on the government to adopt more universal policies due to the increased competition. Going forward, we might see movement towards more universal health policies in Senegal than we have seen in the past. Indeed, since the 2012 election, the Ministry of Health of Senegal has begun to speak publicly about implementing UHC and has even released a preliminary study and action plan to do so. In Kenya, the newly elected President announced plans to exempt pregnant women from users fees but is also exploring the idea of also implementing a voucher program to continue to target poor rural women. In Ghana the NDC has yet to implement the one-time premium and earlier this year, the Christian Health Association of Ghana threatened to pull out of the scheme altogether, citing the non-payment of medical bills by government. Clearly the democratization process in all of these countries has been a complicated and not always linear process, but the timing of improvements in the nature of the democratic process does appear to be connected to the adoption of more universal health policies, providing evidence of a mechanism that can explain the relationship between more democratic governments and improved health outcomes.

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<sup>1</sup> David Lake and Matthew Baum, "The Invisible Hand of Democracy: Political Control and the Provision of Public Services," *Comparative Political Studies* 34, no. 6 (2001): 587-621; Jeroen Klomp and Jakob de Haan, "Is the Political System Really Related to Health?" *Social Science & Medicine* 69, no. 1 (2009): 36-46; Thomas Zweifel and Patricia Navia, "Democracy, Dictatorship, and Infant Mortality," *Journal of Democracy* 11, no. 2 (2000): 99-114. Timothy Besley and Masayuki Kudamatsu, "Health and Democracy," *American Economic Review* 96, no. 2 (2006): 313-318. Alvaro Franco, Carlos Alvarez-Dardet, and Maria Teresa Ruiz, "Effect of democracy on health: ecological study," *BMJ* 329 (2004): 1421; Hazem Adam Ghobarah, Paul Huth, and Bruce Russett, "Comparative Public Health: The Political Economy of Human Misery and Well-Being," *International Studies Quarterly* 48, no. 1 (2004): 73-94.

<sup>2</sup> David Stasavage, "Democracy and Education Spending in Africa," *American Journal of Political Science* 49, no. 2 (2005): 343-358; David Stasavage, "The role of democracy in Uganda's move to universal primary education," *Journal of Modern African Studies* 43, no. 1 (2005): 53-73; David Brown and Ahmed Mushfiq Mobarak, "The Transforming Power of Democracy: Regime Type and the Distribution of Electricity," *American Political Science Review* 103, no. 2 (2009): 193-213.

<sup>3</sup> David Lake and Matthew Baum, "The Invisible Hand of Democracy: Political Control and the Provision of Public Services."

<sup>4</sup> David Brown and Wendy Hunter, "Democracy and Human Capital Formation: Education Spending in Latin America, 1980 to 1997," *Comparative Political Studies* 37, no. 7 (2004): 842-864.

<sup>5</sup> Brian Min, "Democracy and Light: Electoral Accountability and the Provision of Public Goods," unpublished working paper, University of Michigan (2008).

- <sup>6</sup> David Lake and Matthew Baum, “The Invisible Hand of Democracy”; Jeroen Klomp and Jakob de Haan, “Is the Political System Really Related to Health?”
- <sup>7</sup> Thomas Zweifel and Patricia Navia, “Democracy, Dictatorship, and Infant Mortality.”
- <sup>8</sup> Timoty Besley and Masayuki Kudamatsu, “Health and Democracy.”
- <sup>9</sup> Alvaro Franco, Carlos Alvarez-Dardet, and Maria Teresa Ruiz, “Effect of democracy on health: ecological study.”
- <sup>10</sup> Hazem Adam Ghobarah, Paul Huth, and Bruce Russett, “Comparative Public Health: The Political Economy of Human Misery and Well-Being.”
- <sup>11</sup> Michael Ross, “Is Democracy Good for the Poor?” *American Journal of Political Science* 50, no. 4 (2006): 860-874.
- <sup>12</sup> David Stasavage, “Democracy and Education Spending in Africa”; David Stasavage, “The role of democracy in Uganda’s move to universal primary education.”
- <sup>13</sup> Robin Harding and David Stasavage, “What Democracy Does (and Doesn’t) Do for Basic Services: School Fees, School Inputs, and African Elections,” unpublished working paper, NYU (2012).
- <sup>14</sup> David Brown and Ahmed Mushfiq Mobarak, “The Transforming Power of Democracy: Regime Type and the Distribution of Electricity.”
- <sup>15</sup> David Mayhew, *Congress: The Electoral Connection*, New Haven, CT: Yale University Press (1974); Bruce Bueno de Mesquita, Alastair Smith, Randolph M. Siverson and James D. Morrow, *The Logic of Political Survival*, Cambridge, MA: MIT Press (2003).
- <sup>16</sup> For a thorough theoretical treatment of this argument in comparing “visible” public good provision of democratic vs. non-democratic regimes, see Anandi Mani and Sharun Mukand, “Democracy, visibility and public good provision,” *Journal of Development Economics* 83 (2007): 506-529.
- <sup>17</sup> Here we highlight policy visibility, but another useful distinction is between policies that increase provision of goods and services and policies that retrench provision of goods and services. The different policy strategies would have opposite, though not likely equivalent, effects on potential voters.
- <sup>18</sup> Robin Harding and David Stasavage, “What Democracy Does (and Doesn’t) Do for Basic Services.”
- <sup>19</sup> Giovanni Carbone, “Democratic Demands and Social Policies.”
- <sup>20</sup> Raphaël Franck and Ilia Rainer, “Does the Leader’s Ethnicity Matter? Ethnic Favoritism, Education and Health in Sub-Saharan Africa,” *American Political Science Review* 106, no. 2 (2012): 294-325.
- <sup>21</sup> We chose Polity over other frequently used democracy indices first because it measures democracy on a continuous, rather than dichotomous, scale. Alternatively, the Democracy-Dictatorship dataset uses a stark dichotomous classification. During this period, African countries were undergoing democratic change and we wanted a measure that would help us select countries moving along at a similar pace. Freedom House data has also been used by scholars as a continuous measure of democracy, but such an approach with Freedom House data is particularly ill-advised. José Cheibub, Jennifer Gandhi, and James Vreeland, “Democracy and dictatorship revisited,” *Public Choice* 143 (2010): 67-101.
- <sup>22</sup> The Afrobarometer is a comparative series of national public attitude surveys conducted in 20 African countries. Ghana is the only country in our study represented in Round 1, collected in 1999. All three cases – Ghana, Kenya, and Senegal – are represented in data collection during Afrobarometer Rounds 2 (2002-2003), 3 (2005), and 4 (2008).
- <sup>23</sup> Afrobarometer, 2009 [electronic datafiles: 1999-2008], Ann Arbor, MI: Inter-university Consortium for Political and Social Research. Available at: <http://www.afrobarometer.org>.
- <sup>24</sup> The question wording was: “Overall, how satisfied are you with the way democracy works in [country name]?” with the following potential responses: [Country] is not a democracy, Not at All Satisfied, Not Very Satisfied, Fairly Satisfied, and Very Satisfied. Missing data and don’t know responses are not included in the foregoing analysis.
- <sup>25</sup> The question wording was: “In your opinion how much of a democracy is [your country] today?” with the following potential responses: Not a democracy, A democracy, with major problems, A democracy, but with minor problems, and A full democracy. Missing data, don’t



know responses, and respondents reporting to not understand the question are not included in our analyses.

<sup>26</sup> The question wording was: “How well or badly would you say the current government is handling the following matters, or haven’t you heard enough about them to say: Improving basic health services?” Potential responses included: Very Badly, Fairly Badly, Fairly Well, and Very Well. Missing data and don’t know responses are not included in the foregoing analysis.

<sup>27</sup> Gallup World Poll, [electronic data file], retrieved from the Gallup WorldView database on April 25, 2012 at: <https://worldview.gallup.com/>.

<sup>28</sup> The question asked, “In this country, do you have confidence in national government?”

<sup>29</sup> The question asked, “Is corruption widespread throughout the government in this country, or not?”

<sup>30</sup> The question was part of a series and asked, “In this country, do you have confidence in each of the following, or not? How about honesty of elections?”

<sup>31</sup> Demographic and Health Surveys have been conducted in many low and middle-income countries since the mid to late 1980s. Not all low and middle-income countries have conducted a DHS but some have conducted repeated surveys, usually at intervals of 3-6 years. Data is collected from reproductive aged women, their households, and their children. Health utilization data has been collected for children born within 3 or 5 years of the survey. The choice of 3 or 5 years is country specific, but is nearly 5 years in all countries.

<sup>32</sup> Lindsay Whitfield, “Change for a Better Ghana’: Party Competition, Institutionalization and Alternation in Ghana’s 2008 Elections,” *African Affairs* 108, no. 433: 631-641.

<sup>33</sup> Lindsay Whitfield, “Change for a Better Ghana”.

<sup>34</sup> Kevin Fridy, “The Elephant, Umbrella, and Quarrelling Cocks: Disaggregating Partisanship in Ghana’s Fourth Republic,” *African Affairs* 106, no. 423 (2007): 281-305; Lindsay Whitfield, “Change for a Better Ghana”.

<sup>35</sup> Lindsay Whitfield, “Change for a Better Ghana”.

<sup>36</sup> E. Gyimah-Boadi, “Another Step Forward for Ghana,” *Journal of Democracy* 20, no. 2 (2009): 138-152; Steven Radelet, “Success Stories from “Emerging Africa”,” *Journal of Democracy* 21, no. 4 (2010): 87-101.

<sup>37</sup> Stefan Dercon and Roxana Gutiérrez-Romero, “Triggers and Characteristics of the 2007 Kenyan Electoral Violence,” *World Development* 40, no. 4 (2012): 731-744.

<sup>38</sup> Nic Cheeseman, “The 2007 Kenyan Election: An Introduction,” *Journal of Eastern African Studies* 2, no. 2 (2008): 166-184.

<sup>39</sup> Stefan Dercon and Roxana Gutiérrez-Romero, “Triggers and Characteristics of the 2007 Kenyan Electoral Violence.”

<sup>40</sup> Economist Intelligence Unit, “Country Profile 2008: Kenya,” London (2008), accessed from: [http://www.eiu.com/report\\_dl.asp?issue\\_id=1293991314&mode=pdf](http://www.eiu.com/report_dl.asp?issue_id=1293991314&mode=pdf).

<sup>41</sup> Economist Intelligence Unit, “Country Report: Kenya,” London (April 2012), accessed from: [http://www.eiu.com/report\\_dl.asp?issue\\_id=1648992149&mode=pdf](http://www.eiu.com/report_dl.asp?issue_id=1648992149&mode=pdf).

<sup>42</sup> Macky Sall was formerly with the PDS but formed his own party (the APR) in December 2008 following his removal by Wade as the President of the National Assembly in November 2008.

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