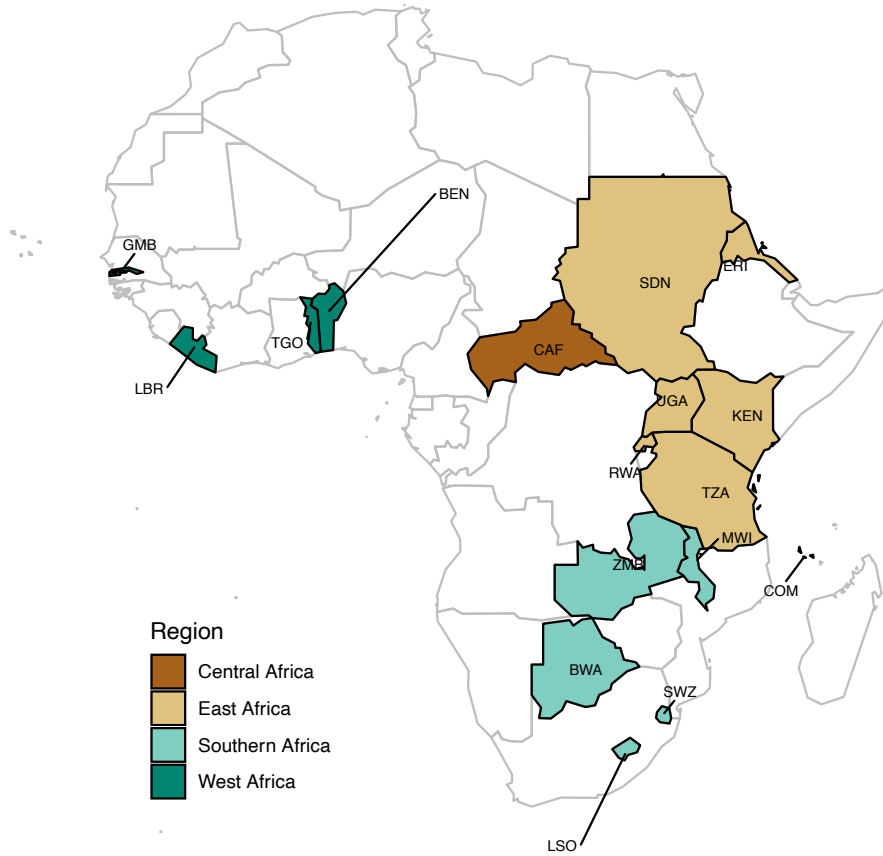
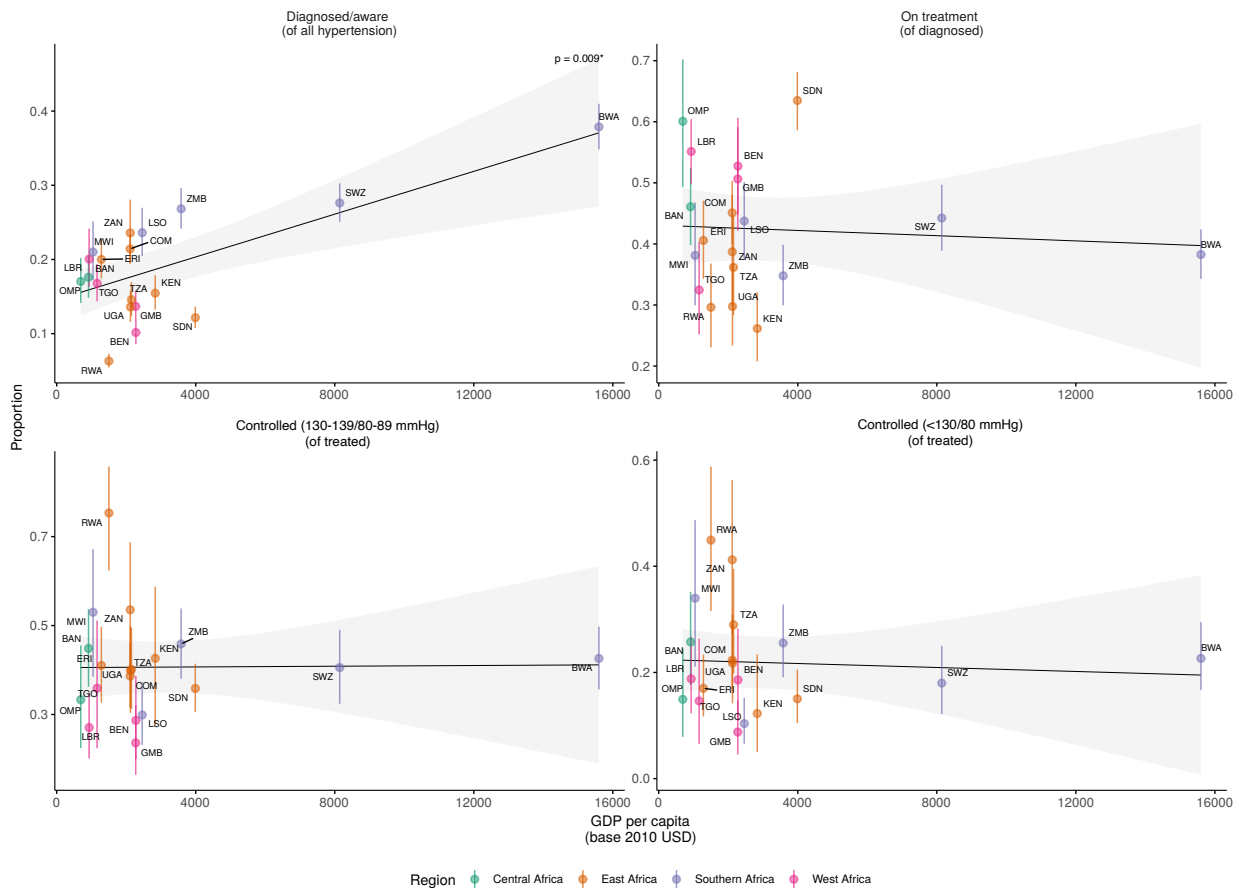


**SUPPLEMENTAL MATERIAL**

1. Figure S1.
2. Figure S2.
3. Table S1.
4. Table S2.



**Figure S1.** Map of countries included in this study, colored by region. Countries are labeled with three-letter codes as follows: BEN = Benin, ERI = Eritrea, MWI = Malawi, TGO = Togo, LBR = Liberia, BAN = Central African Republic (Bangui), OMP = Central African Republic (Bangui & Ombella M’Poko), COM = Comoros, ZMB = Zambia, TZA = Tanzania, ZAN = Tanzania (Zanzibar), LSO = Lesotho, RWA = Rwanda, UGA = Uganda, KEN = Kenya, GMB = The Gambia, SDN = Sudan.



**Figure S2.** Proportion of diagnosed (stage I or higher), treated, and treated and controlled hypertension vs. GDP per capita in base 2010 US dollars (USD) in the country-year of survey collection. The gray shaded region indicates the 95% confidence interval (CI) for the linear regression, while vertical bars represent 95% CI for point estimates. A significant first-order relationship with GDP was noted only for diagnosis ( $p = 0.009$ ), though this appears driven by Eswatini (SWZ) and Botswana (BWA), which had markedly higher GDP than the remaining countries. Countries/subnationals are labeled with three-letter codes as follows: BEN = Benin, ERI = Eritrea, MWI = Malawi, TGO = Togo, LBR = Liberia, BAN = Central African Republic

(Bangui), OMP = Central African Republic (Bangui & Ombella M’Poko), COM = Comoros,  
ZMB = Zambia, TZA = Tanzania, ZAN = Tanzania (Zanzibar), LSO = Lesotho, RWA =  
Rwanda, UGA = Uganda, KEN = Kenya, GMB = The Gambia, SDN = Sudan.

**Table S1.** Characteristics and mean blood pressure values in 17 Sub-Saharan African countries/populations, including three subnational locations, from 2010 – 2017, corresponding to the survey year unless otherwise noted. SDI, sociodemographic index.

Country	Survey year	SDI	Population (% female) †	Median population age (years) in 2010 ‡	Number surveyed (n)	National hypertension guideline available during survey year? §	Mean blood pressure ± SD	
							Systolic	Diastolic
Benin	2015	0.34	10,575,962 (50.2)	17.9	5126	Unknown	126.2±0.5	82.0±0.3
Botswana	2014	0.61	2,088,619 (51.7)	22.2	4070	Yes; Botswana Primary Care Guidelines for Adults (2013)	127.3±0.5	79.8±0.4
Central African Republic – Bangui	2010	0.28*	4,386,765 (50.5)*	17.7*	4029	Unknown	128.1±0.6	82.1±0.4
Central African Republic – Bangui & Ombella M’Poko	2017	0.30*	4,596,023 (50.4)*	17.7*	3301	Unknown	125.3±1.2	80.9±0.8
Comoros	2011	0.42	706,578 (49.6)	19.1	5517	Unknown	127.2±0.4	78.3±0.3
Eritrea	2010	0.35	3,213,969 (50)	19.8	6265	Unknown	117.3±0.4	74.0±0.3
The Gambia	2010	0.35	1,793,199 (50.4)	17.1	4103	Unknown; The Gambia Standard Drug Treatment Guidelines (2021)	129.9±0.6	80.0±0.4
Kenya	2015	0.47	47,878,339 (50.3)	18.1	4500	Yes; Kenya Guidelines for Hypertension Management (2009)	124.4±0.5	80.6±0.4
Lesotho	2012	0.46	2,014,988 (51.2)	21.7	2310	Yes; Lesotho Standard Treatment Guidelines & Essential Medicines List (2005)	126.1±0.6	82.6±0.5
Liberia	2012	0.29	4,135,662 (49.9)	18.5	2503	Yes; Liberia National Therapeutic Guidelines & Essential Medicines List (2011)	128.7±0.7	79.7±0.4
Malawi	2017	0.35	17,670,193 (50.7)	16.6	4187	Yes; Malawi Standard Treatment Guidelines, Ministry of Health (2015)	121.2±0.6	74.8±0.4
Rwanda	2012	0.37	10,549,668 (50.9)	18.9	7226	Unknown; Rwandan Ministry of Health Guideline for the Management of Non-Communicable Diseases (2015)	120.4±0.3	77.7±0.3
Sudan	2016	0.50	39,847,433 (50.1)	18.3	7722	Yes; Sudan Hypertension Guidelines (2012)	127.6±0.3	82.8±0.2
Eswatini	2014	0.55	1,095,022 (52)	19.0	3534	Unknown; Swaziland National Noncommunicable Diseases Prevention & Control Policy (2016)	124.0±0.4	79.7±0.3
Tanzania	2012	0.37	47,053,033 (50.1)	17.4	5680	Unknown; Tanzania Standard Treatment Guidelines & Essential Medicines List 4 <sup>th</sup> edition (2013)	128.6±0.4	80.3±0.3
Tanzania – Zanzibar	2011	0.36*	45,673,520 (50.1)*	17.4*	2639	Unknown	131.3±1.2	78.0±0.6
Togo	2010	0.34	6,421,674 (50.4)	18.5	4370	Unknown	120.1±0.9	75.0±0.6
Uganda	2014	0.37	36,911,530 (50.9)	15.4	3987	Yes; Uganda Ministry of Health’s National Guidelines for the Management of Common Conditions (2012)	124.5±0.4	80.6±0.3
Zambia	2017	0.47	16,853,608 (50.5)	16.2	4302	Unknown; Zambia Hypertension Treatment Guidelines (2019)	124.4±0.3	76.8±0.3

\* Subnational locations did not have available population or SDI estimates; therefore, country-wide estimates for that survey year are presented.

† World Bank estimates (56)

‡ Estimates are from most recent preceding year (2010) from the United Nations Population Division (57)

§ Where available, we report the existence and year of national hypertension guidelines in each country, and whether there was a guideline available during that survey-year. If presence of a national guideline or a prior version of a guideline during a survey year could not be confirmed, we denote this as “unknown,” and where available, report the most recent national guideline.

**Table S2.** Prevalence of undiagnosed stage I or higher, diagnosed and untreated, treated, and treated/controlled hypertension at two different diagnostic thresholds in 17 Sub-Saharan African countries, including three subnational locations, from 2010-2017.

Country	Prevalence % (95% CI)				
	Undiagnosed	Diagnosed/aware, untreated	Treated (>140/90 mmHg)	Effectively treated (130-139/80-89 mmHg)	Effectively treated (<130/80 mmHg)
Eritrea	28.7 (26.8-30.7)	4.3 (3.6-5)	2 (1.5-2.7)	0.3 (0.2-0.5)	0.5 (0.3-0.7)
Malawi	32.8 (28.8-37)	5.4 (4.4-6.5)	2 (1.4-2.8)	0.2 (0.1-0.3)	1.1 (0.6-1.8)
Zambia	35.5 (33.4-37.5)	8.3 (7.2-9.4)	2.7 (2.2-3.3)	0.3 (0.2-0.5)	1 (0.7-1.4)
Togo	36.5 (34-39)	4.9 (4.1-5.8)	1.7 (1.2-2.4)	0.2 (0.1-0.4)	0.3 (0.2-0.6)
Botswana	36.8 (34.3-39.3)	13.7 (12.1-15.3)	5.9 (5-6.8)	0.7 (0.4-1)	1.9 (1.4-2.6)
Swaziland	39.3 (37.2-41.5)	7.5 (6.5-8.6)	4.4 (3.7-5.1)	0.4 (0.2-0.6)	1 (0.7-1.6)
Comoros	40.9 (39-42.8)	6.1 (5.3-6.9)	3.6 (3-4.3)	0.2 (0.1-0.4)	1.1 (0.8-1.5)
Tanzania - Zanzibar	42.8 (38.7-47)	8.1 (6.4-10)	2.8 (1.8-4.1)	0.2 (0.1-0.5)	2.1 (1.1-3.5)
Rwanda	42.8 (40.8-44.8)	2 (1.7-2.3)	0.4 (0.3-0.6)	0 (0-0.1)	0.4 (0.2-0.6)
Liberia	45.5 (41.8-49.2)	4.9 (3.8-6.2)	4.5 (3.7-5.5)	0.2 (0.1-0.5)	1.1 (0.6-1.7)
Central African Republic – Bangui & Ombella M'Poko	45.6 (41.5-49.7)	3.7 (2.2-5.8)	4.4 (3.5-5.5)	0.3 (0.1-0.8)	0.8 (0.5-1.3)
Lesotho	46.3 (42.5-50.1)	7.8 (6.4-9.3)	5 (4.1-6)	0.4 (0.1-0.8)	0.6 (0.4-1)
Tanzania	48.3 (46.3-50.4)	5.2 (3.9-6.6)	1.9 (1.5-2.4)	0.1 (0.1-0.3)	0.8 (0.6-1.2)
Kenya	48.7 (46.1-51.3)	6.5 (5.4-7.8)	1.9 (1.4-2.5)	0.1 (0-0.2)	0.3 (0.1-0.6)
Uganda	48.8 (46.5-51)	5.3 (4.2-6.5)	1.6 (1.2-2)	0.1 (0-0.2)	0.5 (0.3-0.7)
Central African Republic - Bangui	50.2 (47.3-53.1)	5.7 (4.7-7)	3.3 (2.6-4.1)	0.4 (0.2-0.6)	1.3 (0.8-1.9)
Gambia	52.3 (49.4-55.3)	3.8 (2.8-4.9)	3.2 (2.6-3.9)	0.3 (0.1-0.5)	0.3 (0.2-0.6)
Benin	53.3 (50.8-55.7)	2.8 (2.2-3.6)	2.5 (2-3.1)	0.1 (0-0.2)	0.6 (0.3-1)
Sudan	58.5 (56.7-60.3)	2.9 (2.4-3.5)	3.8 (3.3-4.4)	0.5 (0.3-0.6)	0.8 (0.5-1.1)