ISN-GKHA: Structures, organization and services for the management of kidney failure in North America and the Caribbean

**Supplementary Tables, Figures, and Appendix** 

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**Figure S7:** Populations covered by national non-communicable disease and chronic kidney disease strategies.

**Appendix:** Reference list for annual cost of kidney replacement therapy (for Table 1).

**Table S1:** Burden of chronic kidney disease and its risk factors in the North America and the Caribbean region.\*S1, S2

Country	CKD Prevalence % (95% CI)	Deaths attributed to CKD % (95% CI)	DALYs attributed to CKD % (95% CI)	Obesity % (95% CI)	Increased BP % (95% CI)	Smoking % (95% CI)	
Global	9.69 (9.25 - 10.14)	2.66 (2.42 - 2.90)	1.68 (1.53 - 1.82)	19.51 (17.88 - 21.13)	24.43 (23.77 - 25.09)	14.02 (12.91 - 15.12)	
North America	11.87 (10.83 - 12.92)	3.59 (3.13 - 4.05)	2.60 (2.22 - 2.98)	25.54 (21.18 - 29.90)	21.81 (18.26 - 25.36)	8.38 (5.66 - 11.11)	
Antigua & Barbuda	10.79 (10.01 - 11.63)	4.61 (4.36 - 4.89)	3.15 (2.83 - 3.47)	19.10 (13.90 - 24.80)	23.40 (16.60 - 31.10)	3.30 (2.50 - 4.50)	
Bahamas	9.93 (9.23 - 10.71)	3.68 (3.47 - 3.88)	2.62 (2.40 - 2.84)	32.10 (26.10 - 38.50)	20.90 (15.10 - 27.90)	6.10 (4.70 - 8.00)	
Barbados	13.63 (12.65 - 14.72)	3.22 (3.03 - 3.42)	2.60 (2.39 - 2.81)	24.80 (19.80 - 30.20)	24.40 (18.00 - 31.50)	4.20 (3.20 - 5.50)	
Bermuda	13.86 (12.87 - 15.07)	3.09 (2.90 - 3.30)	2.31 (2.09 - 2.52)	-	-	9.00 (7.10 - 11.20)	
Canada	10.25 (9.48 - 11.15)	2.18 (2.06 - 2.31)	1.29 (1.18 - 1.40)	31.30 (27.40 - 35.30)	13.20 (9.40 - 17.70)	13.80 (12.00 - 15.90)	
Cayman Islands	-	-	-	-	-	-	
Jamaica	10.67 (9.91 - 11.49)	4.00 (3.63 - 4.32)	2.89 (2.56 - 3.22)	24.40 (19.90 - 29.20)	21.80 (16.00 - 28.40)	9.40 (7.30 - 11.70)	
St. Kitts & Nevis	-	-	-	23.10 (17.70 - 29.10)	25.30 (18.70 - 32.40)	-	
St. Lucia	11.17 (10.38 - 12.01)	4.16 (3.87 - 4.43)	3.04 (2.76 - 3.32)	19.80 (14.90 - 25.10)	27.10 (20.20 - 35.00)	8.00 (6.40 - 10.10)	
St. Vincent & the Grenadines	11.65 (10.86 - 12.55)	3.64 (3.42 - 3.86)	2.83 (2.58 - 3.06)	23.80 (18.40 - 29.80)	23.30 (17.00 - 30.50)	6.40 (5.00 - 8.00)	
Trinidad & Tobago	11.46 (10.62 - 12.45)	4.14 (3.91 - 4.41)	2.93 (2.64 - 3.24)	19.70 (14.50 - 25.70)	25.80 (18.70 - 33.90)	14.60 (12.10 - 17.20)	
Turks & Caicos	-	-	-	-	-	-	
United States	12.75 (11.87 - 13.78)	2.97 (2.93 - 3.02)	1.90 (1.76 - 2.04)	37.30 (33.40 - 41.30)	12.90 (9.80 - 16.80)	13.30 (13.00 - 13.60)	
Virgin Islands (U.S.)	14.44 (13.33 - 15.70)	3.81 (3.51 - 4.08)	3.02 (2.75 - 3.28)	=	-	4.10 (3.10 - 5.50)	

Abbreviations: CKD: chronic kidney disease; BP: blood pressure; DALYs: disability-adjusted life years; CI: confidence interval

<sup>-:</sup> Data not reported/unavailable.

<sup>\*</sup> Results are expressed as percentage (%) of the population

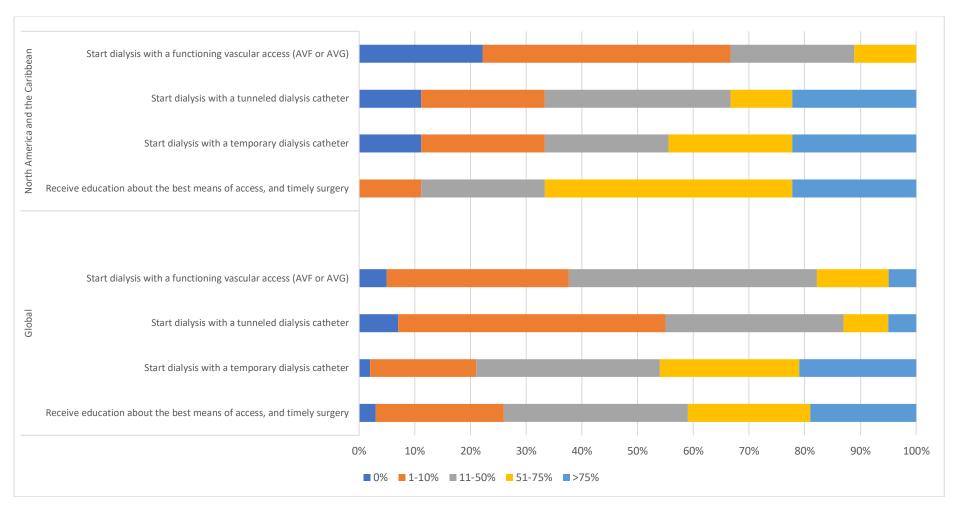
Figure S1: Shortages of kidney failure providers in the North America and the Caribbean region.

Country	Nephrologists	Transplant	Surgeons (HD access)	Surgeons (PD access)	Interventional radiologists (HD access)	Interventional radiologists (PD access)	Laboratory	Dietitians	Radiologists (ultrasound)	Vascular access coordinators	Counselors/ psychologists	Transplant	Dialysis nurses	Dialysis technicians	TOTAL
Total shortage →	4	7	5	3	5	4	1	0	0	3	3	5	3	4	
Antigua & Barbuda															7
Bahamas															0
Canada															0
Cayman Islands															2
Jamaica															9
St. Kitts & Nevis															9
St. Lucia															5
St. Vincent & the Grenadines															6
Trinidad & Tobago															7
United States			ZII.4. G1.1		TT 1d 4.d		11. 1	PD :	1 11 1						2

Abbreviations: ISN: International Society of Nephrology; GKHA: Global Kidney Health Atlas; HD: hemodialysis; PD: peritoneal dialysis

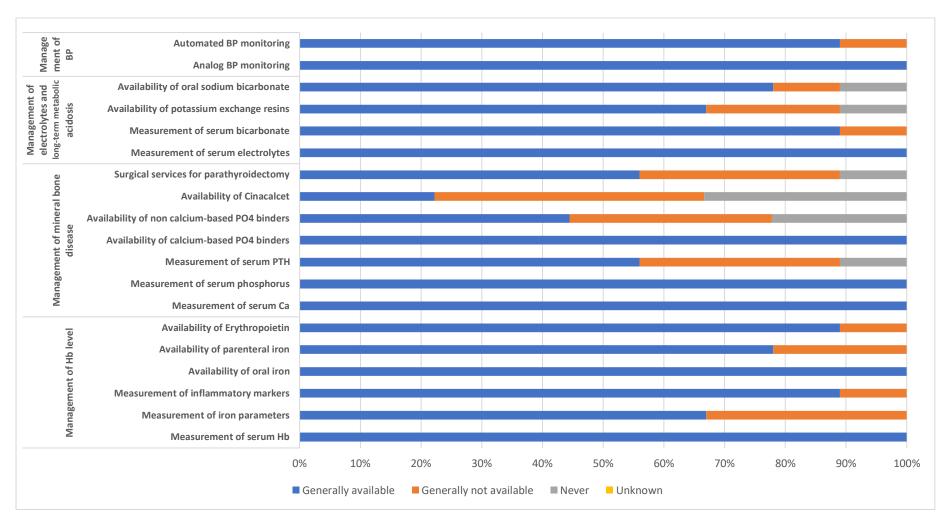
No shortage Shortage

**Figure S2:** Proportion of patients starting dialysis with different forms of vascular access and adequate education in the North America and the Caribbean region.



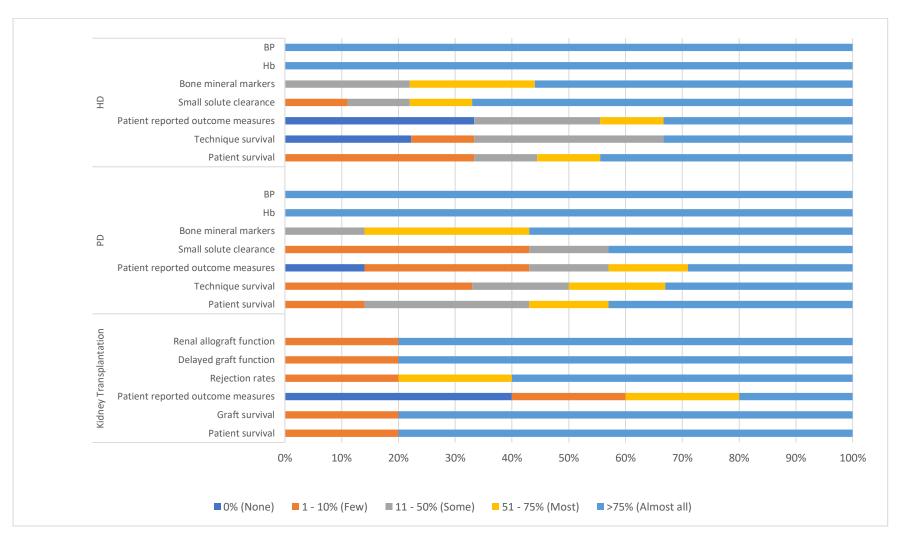
Abbreviations: AVF: arteriovenous fistula; AVG: arteriovenous graft

Figure S3: Availability of services to diagnose and treat complications of kidney failure in the North America and the Caribbean region.



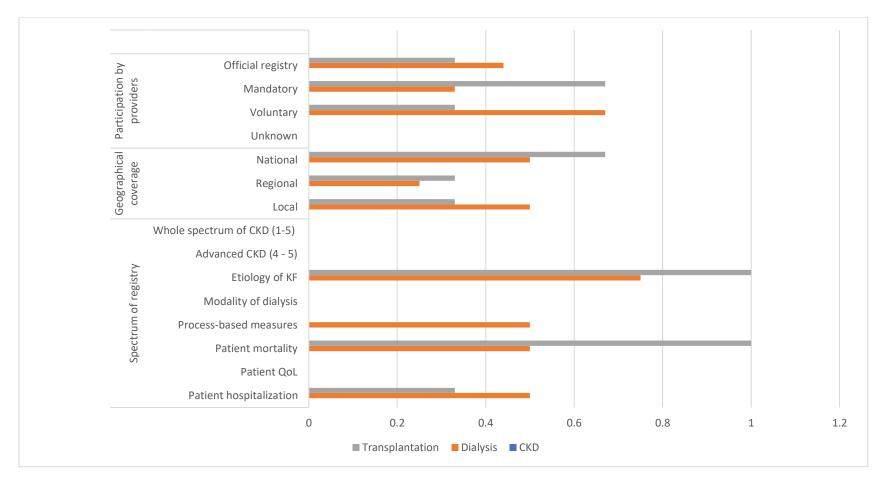
Abbreviations: BP: blood pressure; Hb: haemoglobin; PTH: parathyroid hormone; Ca: calcium; PO4: phosphate

**Figure S4:** Quality indicators monitored and reported by countries in the North America and the Caribbean region that participated in the ISN-GKHA survey.



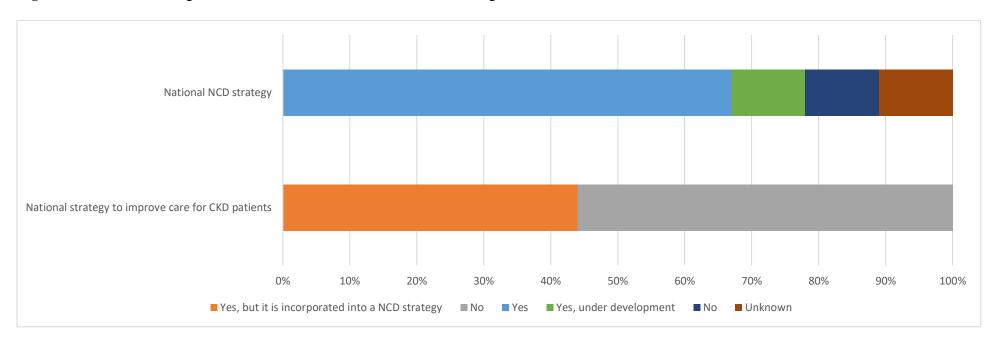
Abbreviations: HD: hemodialysis; PD: peritoneal dialysis; BP: blood pressure; Hb: hemoglobin; BP: blood pressure

**Figure S5:** Registry characteristics for countries in the North America and the Caribbean region that reported having one or more in the ISN-GKHA survey.



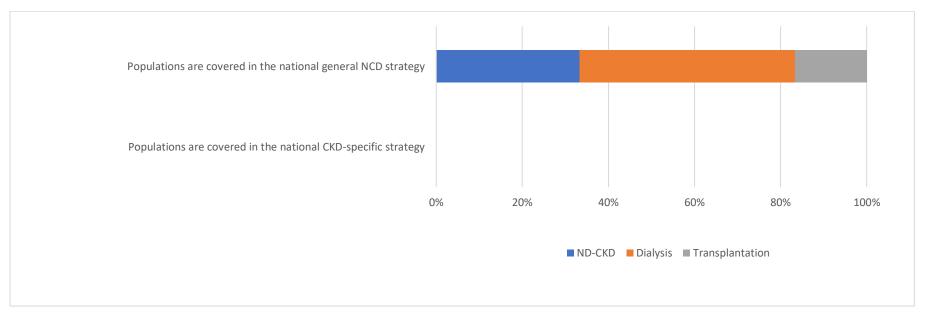
Abbreviations: CKD: chronic kidney disease; KF: kidney failure; QoL – quality of life

Figure S6: National strategies in the North America and the Caribbean region.



Abbreviations: NCD: non-communicable disease; CKD: chronic kidney disease

Figure S7: Populations covered by national non-communicable disease and chronic kidney disease strategies



Abbreviations: NCD: non-communicable disease; ND-CKD: non-dialysis chronic kidney disease

## **Supplementary References:**

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