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Quality of prescribing in chronic kidney disease and type 2 diabetes

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Appendix 3: Supplemental data chapter 4

Table S4.1: Baseline characteristics per location

	Clinic A (n=569)		Clinic B (n=845)		Clinic C (n=1,718)	
	N (%)	Mean (\pm SD)	N (%)	Mean (\pm SD)	N (%)	Mean (\pm SD)
Age (years)	569 (100)	63.4 (\pm 14.6)	845 (100)	65.0 (\pm 15.3)	1,718 (100)	70.5 (\pm 12.6)
< 50 years	98 (17.2)		134 (15.9)		131 (7.6)	
50-80 years	397 (69.8)		581 (68.8)		1,171 (68.2)	
\geq 80 years	74 (13.0)		130 (15.4)		416 (24.2)	
Gender (males)	323 (56.8)		446 (52.8)		969 (56.4)	
Diabetes (yes)	145 (25.5)		164 (19.4)		176 (10.2)	
eGFR (MDRD) ml/min	569 (100)	28.4 (\pm 14.2)	845 (100)	35.9 (\pm 14.1)	1,718 (100)	36.5 (\pm 13.1)
Stage 3a	92 (16.2)		255 (30.2)		496 (28.9)	
Stage 3b	166 (29.2)		295 (34.9)		664 (38.7)	
Stage 4	183 (32.2)		219 (25.9)		460 (26.8)	
Stage 5	128 (22.5)		76 (9.0)		98 (5.7)	
SBP (mmHg)	552 (97.0)	131.7 (\pm 18.6)	470 (55.6)	133.4 (\pm 20.7)	1,489 (86.7)	131.7 (\pm 18.2)
Elevated SBP (>140 mmHg)	137 (24.1)	156.2 (\pm 12.7)	143 (16.9)	158.0 (\pm 13.3)	420 (24.4)	154.0 (\pm 11.8)
DBP (mmHg)	552 (97.0)	72.0 (\pm 12.4)	470 (55.6)	76.0 (\pm 10.7)	1,489 (86.7)	76.0 (\pm 10.7)
Low DBP (<70 mmHg)	202 (35.5)	59.4 (\pm 6.9)	100 (11.8)	61.7 (\pm 4.4)	402 (23.4)	62.6 (\pm 5.2)
Total protein (g/24h urine)	513 (90.2)	0.4 [0.1-1.2] ^a	244 (28.9)	0.9 [0.3-2.1] ^a	557 (32.4)	0.3 [0.1-0.9] ^a
Total protein (g/l urine)	515 (90.5)	0.2 [0.1-0.7] ^a	574 (67.9)	0.3 [0.1-0.7] ^a	1,239 (72.1)	0.2 [0.1-0.4] ^a
Proteinuria (>0.5 g/24h or L urine)	215 (37.8)		238 (28.2)		357 (20.8)	
Phosphate (mmol/l)	544 (95.6)	1.20 (\pm 0.33)	623 (73.7)	1.10 (\pm 0.32)	1,439 (83.8)	1.02 (\pm 0.24)
Elevated phosphate (>1.49 mmol/l)	78 (13.7)	1.79 (\pm 0.33)	49 (5.8)	1.87 (\pm 0.40)	45 (2.6)	1.73 (\pm 0.29)
Calcium (mmol/l)	546 (96.0)	2.35 (\pm 0.17)	663 (78.5)	2.34 (\pm 0.14)	1,525 (88.8)	2.37 (\pm 0.12)

Table S4.1: Baseline characteristics per location (continued)

	Clinic A (n=569)		Clinic B (n=845)		Clinic C (n=1,718)	
	N (%)	Mean (±SD)	N (%)	Mean (±SD)	N (%)	Mean (±SD)
Elevated Calcium (>2.54 mmol/l)	35 (6.2)	2.62 (±0.06)	28 (3.3)	2.62 (±0.06)	100 (5.8)	2.62 (±0.09)
Haemoglobin level (mmol/l)	565 (99.3)	7.75 (±1.09)	808 (95.6)	8.0 (±1.2)	1,651 (96.1)	8.1 (±1.1)
Low haemoglobin level (<7.5 mmol/l)	222 (39.0)	6.7 (±0.6)	253 (29.9)	6.7 (±0.6)	458 (26.7)	6.8 (±0.6)

eGFR: estimated glomerular filtration rate; MDRD: Modification of Diet in Renal Disease; SBP: systolic blood pressure; DBP: diastolic blood pressure.

Clinic A and B: university nephrology outpatient clinics; clinic C: non-university nephrology outpatient clinic.

^a Median with interquartile range.

Table S4.2: Baseline table per CKD stage per location

CKD stage 3a	Clinic A (N=92)		Clinic B (N=255)		Clinic C (N=496)	
	N (%)	Mean (\pm SD)	N (%)	Mean (\pm SD)	N (%)	Mean (\pm SD)
Age (years)	92 (100)	56.8 (\pm 13.5)	255 (100)	60.5 (\pm 14.9)	496 (100)	65.6 (\pm 13.4)
< 50 years	26 (28.3)		56 (22.0)		69 (13.9)	
50-80 years	62 (67.4)		182 (71.4)		360 (72.6)	
\geq 80 years	4 (4.4)		17 (6.7)		67 (13.5)	
Gender (males)	46 (50.0)		135 (52.9)		275 (55.4)	
Diabetes (yes)	14 (15.2)		39 (15.3)		43 (8.7)	
eGFR (MDRD) ml/min	92 (100)	51.1 (\pm 4.2)	255 (100)	52.4 (\pm 4.2)	496 (100)	52.3 (\pm 4.4)
SBP (mmHg)	91 (98.9)	126.3 (\pm 17.4)	122 (47.8)	128.5 (\pm 18.8)	388 (78.2)	130.4 (\pm 16.7)
Elevated SBP (>140 mmHg)	12 (13.0)	157.1 (\pm 15.7)	23 (9.0)	157.4 (\pm 12.9)	84 (16.9)	154.5 (\pm 11.7)
DBP (mmHg)	91 (98.9)	73.4 (\pm 12.5)	122 (47.8)	76.0 (\pm 10.5)	388 (78.2)	77.6 (\pm 10.0)
Low DBP (<70 mmHg)	31 (33.7)	59.8 (\pm 6.1)	22 (8.6)	61.3 (\pm 4.4)	77 (15.5)	63.2 (\pm 5.2)
Total protein (g/24h urine)	84 (91.3)	0.2 [0.1-1.0] ^a	62 (24.3)	0.5 [0.3-1.3] ^a	132 (26.6)	0.2 [0.1-0.5] ^a
Total protein (g/l urine)	84 (91.3)	0.1 [0.1-0.4] ^a	165 (65.7)	0.1 [0.0-0.4] ^a	303 (61.1)	0.1 [0.1-0.3] ^a
Proteinuria (>0.5 g/24h or L urine)	29 (31.5)		52 (20.4)		59 (11.9)	
Phosphate (mmol/l)	83 (90.2)	1.02 (\pm 0.20)	139 (54.5)	0.98 (\pm 0.22)	317 (63.9)	0.94 (\pm 0.19)
Elevated phosphate (>1.49 mmol/l)	0 (0.0)	-	2 (0.8)	1.72 (\pm 0.30)	1 (0.2)	1.63 (-)
Calcium (mmol/l)	84 (91.3)	2.38 (\pm 0.14)	159 (62.4)	2.37 (\pm 0.11)	373 (75.2)	2.38 (\pm 0.11)
Elevated Calcium (>2.54 mmol/l)	6 (6.5)	2.60 (\pm 0.05)	7 (2.7)	2.62 (\pm 0.06)	27 (5.4)	2.62 (\pm 0.08)
Haemoglobin level (mmol/l)	90 (97.8)	8.4 (\pm 1.2)	231 (90.6)	8.6 (\pm 1.0)	450 (90.7)	8.4 (\pm 1.0)
Low haemoglobin level (<7.5 mmol/l)	15 (16.3)	6.6 (\pm 0.5)	29 (11.4)	6.8 (\pm 0.6)	69 (13.9)	6.8 (\pm 0.6)

Table S4.2. Baseline table per CKD stage per location (continued)

CKD stage 3b	Clinic A (N=166)			Clinic B (N=295)			Clinic C (N=664)		
	N (%)	Mean (±SD)	N (%)	Mean (±SD)	N (%)	Mean (±SD)	N (%)	Mean (±SD)	
Age	166 (100)	63.4 (±14.3)	295 (100)	66.9 (±14.8)	664 (100)	71.2 (±11.5)	664 (100)	71.2 (±11.5)	
< 50 years	33 (19.9)		40 (13.6)		40 (6.0)		40 (6.0)		
50-80 years	115 (69.3)		200 (67.8)		478 (72.0)		478 (72.0)		
≥ 80 years	18 (10.8)		55 (18.6)		146 (22.0)		146 (22.0)		
Gender (males)	98 (59.0)		147 (49.8)		369 (55.6)		369 (55.6)		
Diabetes (yes)	44 (26.5)		54 (18.3)		68 (10.2)		68 (10.2)		
eGFR (MDRD) ml/min	166 (100)	36.4 (±4.4)	295 (100)	37.6 (±4.1)	664 (100)	37.4 (±4.2)	664 (100)	37.4 (±4.2)	
SBP (mmHg)	163 (98.2)	129.6 (±17.0)	160 (54.2)	131.6 (±21.0)	587 (88.4)	130.7 (±18.3)	587 (88.4)	130.7 (±18.3)	
Elevated SBP (>140 mmHg)	33 (19.9)	153.8 (±14.2)	49 (16.6)	156.6 (±12.9)	157 (23.4)	153.7 (±11.9)	157 (23.4)	153.7 (±11.9)	
DBP (mmHg)	163 (98.2)	72.4 (±12.4)	160 (54.2)	75.5 (±10.3)	587 (88.4)	75.4 (±11.1)	587 (88.4)	75.4 (±11.1)	
Low DBP (<70 mmHg)	61 (36.7)	60.2 (±6.6)	35 (11.9)	61.8 (±4.2)	186 (28.0)	62.8 (±5.0)	186 (28.0)	62.8 (±5.0)	
Total protein (g/24h urine)	148 (89.2)	0.2 [0.1-0.6] ^a	67 (22.7)	0.7 [0.2-2.0] ^a	211 (31.8)	0.2 [0.1-0.7] ^a	211 (31.8)	0.2 [0.1-0.7] ^a	
Total protein (g/l urine)	150 (90.4)	0.2 [0.1-0.4] ^a	190 (64.4)	0.2 [0.1-0.5] ^a	501 (75.5)	0.2 [0.1-0.4] ^a	501 (75.5)	0.2 [0.1-0.4] ^a	
Proteinuria (>0.5 g/24h or L urine)	39 (23.5)		63 (21.4)		122 (18.4)		122 (18.4)		
Phosphate (mmol/l)	160 (96.4)	1.04 (±0.21)	213 (72.2)	1.02 (±0.22)	586 (88.3)	0.98 (±0.19)	586 (88.3)	0.98 (±0.19)	
Elevated phosphate (>1.49 mmol/l)	5 (3.0)	1.58 (±0.04)	6 (2.0)	1.80 (±0.28)	6 (0.9)	1.57 (±0.08)	6 (0.9)	1.57 (±0.08)	
Calcium (mmol/l)	160 (96.4)	2.37 (±0.15)	231 (78.3)	2.34 (±0.12)	607 (91.4)	2.37 (±0.13)	607 (91.4)	2.37 (±0.13)	
Elevated Calcium (>2.54 mmol/l)	10 (6.0)	2.62 (±0.06)	7 (2.4)	2.61 (±0.06)	44 (6.6)	2.63 (±0.10)	44 (6.6)	2.63 (±0.10)	
Haemoglobin level (mmol/l)	166 (100)	8.1 (±1.0)	284 (96.3)	8.1 (±1.1)	645 (97.1)	8.2 (±1.0)	645 (97.1)	8.2 (±1.0)	
Low haemoglobin level (<7.5 mmol/l)	37 (22.2)	6.9 (±0.5)	81 (27.5)	6.8 (±0.5)	146 (22.0)	6.8 (±0.5)	146 (22.0)	6.8 (±0.5)	

Table S4.2. Baseline table per CKD stage per location (continued)

CKD stage 4	Clinic A (N=183)		Clinic B (N=219)		Clinic C (N=460)	
	N (%)	Mean (\pm SD)	N (%)	Mean (\pm SD)	N (%)	Mean (\pm SD)
Age						
< 50 years	183 (100)	65.3 (\pm 14.6)	219 (100)	67.4 (\pm 15.2)	460 (100)	73.4 (\pm 11.8)
50-80 years	24 (13.1)		26 (11.9)		20 (4.4)	
\geq 80 years	126 (68.9)		149 (68.0)		281 (61.1)	
Gender (males)	33 (18.0)		44 (20.1)		159 (34.6)	
Diabetes (yes)	98 (53.6)		119 (54.3)		271 (58.9)	
	55 (30.1)		58 (26.5)		52 (11.3)	
eGFR (MDRD) ml/min	183 (100)	22.3 (\pm 4.2)	219 (100)	23.0 (\pm 4.3)	460 (100)	23.4 (\pm 4.2)
SBP (mmHg)	176 (96.2)	132.0 (\pm 19.4)	140 (63.9)	136.8 (\pm 21.0)	419 (91.1)	132.6 (\pm 18.7)
Elevated SBP (>140 mmHg)	48 (26.2)	156.8 (\pm 11.4)	50 (22.8)	159.1 (\pm 13.8)	135 (29.3)	153.5 (\pm 11.5)
DBP (mmHg)	176 (96.2)	71.6 (\pm 12.8)	140 (63.9)	75.1 (\pm 10.9)	419 (91.1)	75.7 (\pm 10.3)
Low DBP (<70 mmHg)	66 (36.1)	59.0 (\pm 7.6)	38 (17.4)	61.7 (\pm 4.7)	110 (23.9)	62.6 (\pm 5.1)
Total protein (g/24h urine)	163 (89.1)	0.4 [0.1-1.0] ^a	75 (34.2)	0.9 [0.3-2.3] ^a	165 (35.9)	0.4 [0.2-1.3] ^a
Total protein (g/l urine)	163 (89.1)	0.2 [0.1-0.6] ^a	162 (74.0)	0.3 [0.2-0.8] ^a	362 (78.7)	0.2 [0.1-0.6] ^a
Proteinuria (>0.5 g/24h or L urine)	63 (34.4)		77 (35.2)		128 (27.8)	
Phosphate (mmol/l)	176 (96.2)	1.18 (\pm 0.23)	200 (91.3)	1.14 (\pm 0.32)	439 (95.4)	1.05 (\pm 0.2)
Elevated phosphate (>1.49 mmol/l)	16 (8.7)	1.62 (\pm 0.11)	17 (7.8)	1.84 (\pm 0.47)	8 (1.7)	1.66 (\pm 0.11)
Calcium (mmol/l)	176 (96.2)	2.35 (\pm 0.20)	199 (90.9)	2.34 (\pm 0.16)	447 (97.2)	2.36 (\pm 0.12)
Elevated Calcium (>2.54 mmol/l)	13 (7.1)	2.61 (\pm 0.07)	9 (4.1)	2.65 (\pm 0.07)	24 (5.2)	2.62 (\pm 0.06)
Haemoglobin level (mmol/l)	182 (99.5)	7.6 (\pm 1.0)	217 (99.1)	7.7 (\pm 1.2)	458 (99.6)	7.8 (\pm 1.0)
Low haemoglobin level (<7.5 mmol/l)	82 (44.8)	6.7 (\pm 0.7)	89 (40.6)	6.6 (\pm 0.6)	175 (38.0)	6.7 (\pm 0.6)

Table S4.2. Baseline table per CKD stage per location (continued)

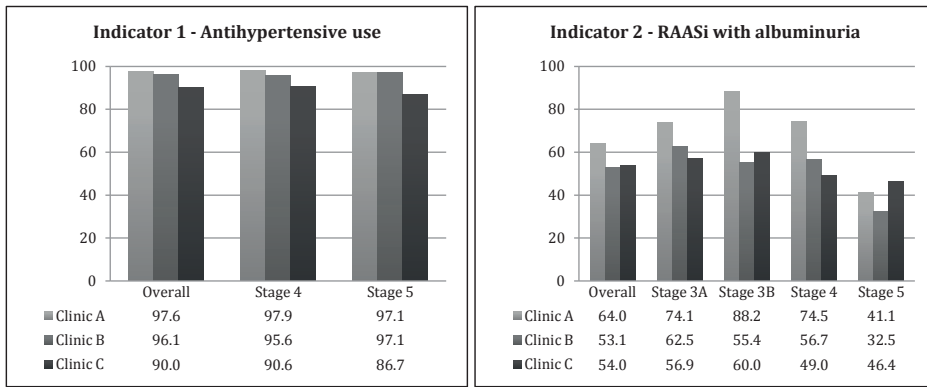
CKD stage 5	Clinic A (N=128)			Clinic B (N=76)			Clinic (N=98)		
	N (%)	Mean (±SD)	N (%)	Mean (±SD)	N (%)	Mean (±SD)	N (%)	Mean (±SD)	
Age	128 (100)	65.5 (±14.7)	76 (100)	65.5 (±15.9)	98 (100)	76.9 (±10.6)			
< 50 years	15 (11.7)		12 (15.8)		2 (2.0)				
50-80 years	94 (73.4)		40 (65.8)		52 (53.1)				
≥ 80 years	19 (14.8)		14 (18.4)		44 (44.9)				
Gender (males)	81 (63.3)		45 (59.2)		54 (55.1)				
Diabetes (yes)	32 (25.0)		13 (17.1)		13 (13.3)				
eGFR (MDRD) ml/min	128 (100)	10.5 (±2.6)	76 (100)	11.2 (±2.4)	98 (100)	11.9 (±2.6)			
SBP (mmHg)	122 (95.3)	137.9 (±18.6)	48 (63.2)	142.1 (±19.8)	95 (96.9)	139.2 (±19.7)			
Elevated SBP (>140 mmHg)	44 (34.4)	157.1 (±12.2)	21 (27.6)	159.6 (±14.2)	44 (44.9)	155.9 (±12.2)			
DBP (mmHg)	122 (95.3)	71.1 (±11.6)	48 (63.2)	80.6 (±11.4)	95 (96.9)	74.4 (±11.9)			
Low DBP (<70 mmHg)	44 (34.4)	58.5 (±6.7)	5 (6.6)	62.2 (±4.1)	29 (29.6)	60.2 (±6.4)			
Total protein (g/24h urine)	118 (92.2)	1.3 [0.5-2.7] ^a	40 (52.6)	1.9 [0.9-4.1] ^a	49 (50.0)	1.0 [0.4-2.6] ^a			
Total protein (g/l urine)	118 (92.2)	0.7 [0.3-1.4] ^a	57 (75.0)	1.4 [0.5-2.4] ^a	73 (74.5)	0.6 [0.3-1.1] ^a			
Proteinuria (>0.5 g/24h or L urine)	84 (65.6)		57 (60.5)		48 (49.0)				
Phosphate (mmol/l)	125 (97.7)	1.55 (±0.39)	71 (93.4)	1.47 (±0.42)	97 (99.0)	1.39 (±0.36)			
Elevated phosphate (>1.49 mmol/l)	57 (44.5)	1.86 (±0.36)	24 (31.6)	1.92 (±0.39)	30 (30.6)	1.79 (±0.34)			
Calcium (mmol/l)	126 (98.4)	2.31 (±0.16)	74 (97.4)	2.27 (±0.19)	98 (100)	2.32 (±0.14)			
Elevated Calcium (>2.54 mmol/l)	13 (10.2)	2.65 (±0.07)	5 (6.6)	2.63 (±0.08)	5 (5.1)	2.66 (±0.11)			
Haemoglobin level (mmol/l)	127 (99.2)	7.0 (±0.8)	76 (100)	7.0 (±1.2)	98 (100)	7.0 (±0.9)			
Low haemoglobin level (<7.5 mmol/l)	88 (68.8)	6.6 (±0.5)	54 (71.1)	6.4 (±0.8)	68 (69.4)	6.6 (±0.7)			

CKD: chronic kidney disease; SD: standard deviation; eGFR: estimated glomerular filtration rate; MDRD: Modification of Diet in Renal Disease; SBP: systolic blood pressure; DBP: diastolic blood pressure.

Clinic A and B: university nephrology outpatient clinics; clinic C: non-university nephrology outpatient clinic.

^a Median with interquartile range.

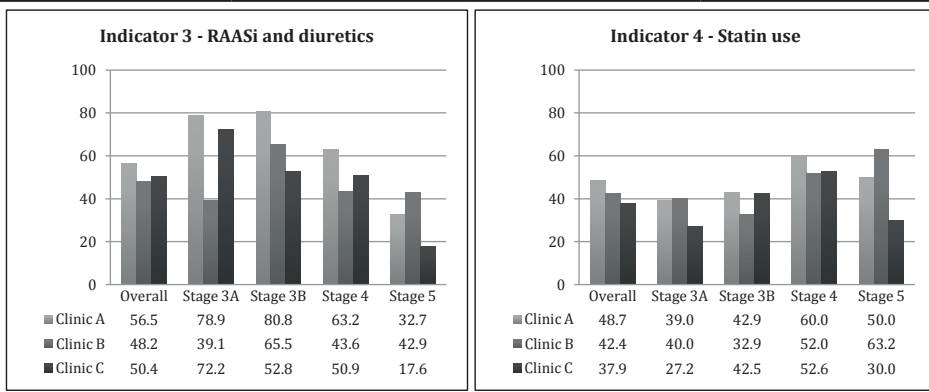
Table S4.3: Differences between outpatient clinics per indicator stratified for CKD stage



Overall	p-value χ^2
Clinic A vs. Clinic B	0.316
Clinic A vs. Clinic C	0.003
Clinic B vs. Clinic C	0.095
<i>CKD stage 4</i>	
Clinic A vs. Clinic B	0.406 [†]
Clinic A vs. Clinic C	0.011
Clinic B vs. Clinic C	0.196
<i>CKD stage 5</i>	
Clinic A vs. Clinic B	1.000 [†]
Clinic A vs. Clinic C	0.103 [†]
Clinic B vs. Clinic C	0.306 [†]

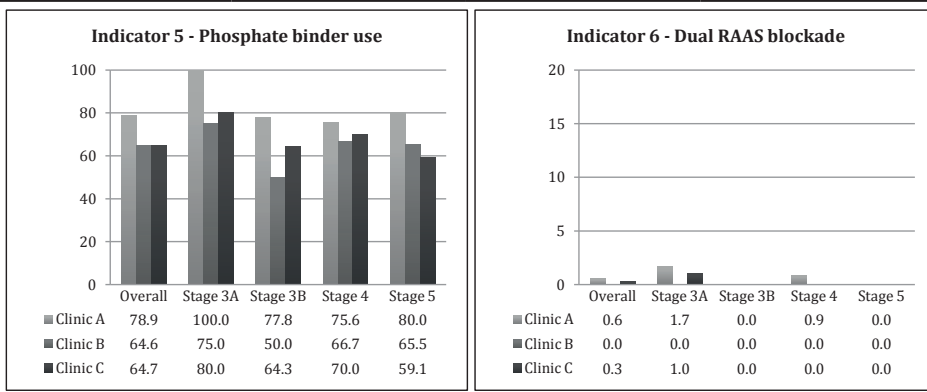
Overall	p-value χ^2
Clinic A vs. Clinic B	0.030
Clinic A vs. Clinic C	0.003
Clinic B vs. Clinic C	0.503
<i>CKD stage 3a</i>	
Clinic A vs. Clinic B	0.190
Clinic A vs. Clinic C	0.095
Clinic B vs. Clinic C	0.675
<i>CKD stage 3b</i>	
Clinic A vs. Clinic B	0.002
Clinic A vs. Clinic C	0.001
Clinic B vs. Clinic C	0.819
<i>CKD stage 4</i>	
Clinic A vs. Clinic B	0.089
Clinic A vs. Clinic C	0.001
Clinic B vs. Clinic C	0.117
<i>CKD stage 5</i>	
Clinic A vs. Clinic B	0.209
Clinic A vs. Clinic C	0.243
Clinic B vs. Clinic C	0.923

Table S4.3: Differences between outpatient clinics per indicator stratified for CKD stage (continued)



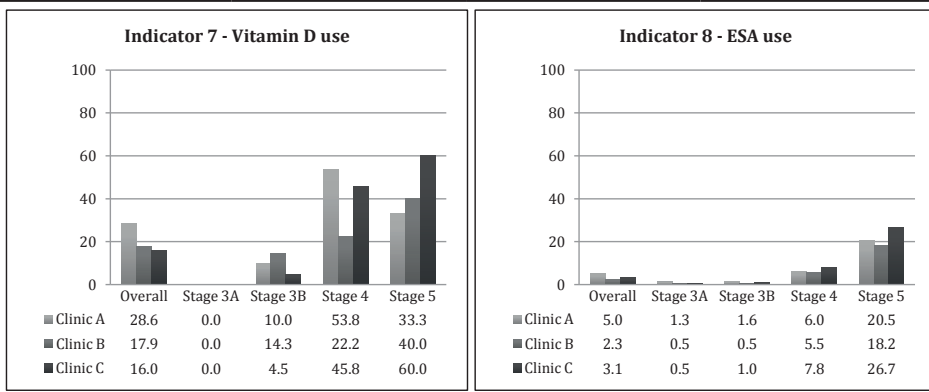
Overall	p-value χ^2	Overall	p-value χ^2
Clinic A vs. Clinic B	0.184	Clinic A vs. Clinic B	0.205
Clinic A vs. Clinic C	0.081	Clinic A vs. Clinic C	0.015
Clinic B vs. Clinic C	0.786	Clinic B vs. Clinic C	0.277
<i>CKD stage 3a</i>		<i>CKD stage 3a</i>	
Clinic A vs. Clinic B	0.014	Clinic A vs. Clinic B	0.916
Clinic A vs. Clinic C	1.000	Clinic A vs. Clinic C	0.140
Clinic B vs. Clinic C	0.014	Clinic B vs. Clinic C	0.042
<i>CKD stage 3b</i>		<i>CKD stage 3b</i>	
Clinic A vs. Clinic B	0.068	Clinic A vs. Clinic B	0.266
Clinic A vs. Clinic C	0.002	Clinic A vs. Clinic C	0.966
Clinic B vs. Clinic C	0.235	Clinic B vs. Clinic C	0.189
<i>CKD stage 4</i>		<i>CKD stage 4</i>	
Clinic A vs. Clinic B	0.245	Clinic A vs. Clinic B	0.409
Clinic A vs. Clinic C	0.337	Clinic A vs. Clinic C	0.395
Clinic B vs. Clinic C	0.766	Clinic B vs. Clinic C	0.950
<i>CKD stage 5</i>		<i>CKD stage 5</i>	
Clinic A vs. Clinic B	0.586	Clinic A vs. Clinic B	0.340
Clinic A vs. Clinic C	0.033	Clinic A vs. Clinic C	0.309 [†]
Clinic B vs. Clinic C	0.021	Clinic B vs. Clinic C	0.128 [†]

Table S4.3: Differences between outpatient clinics per indicator stratified for CKD stage (continued)



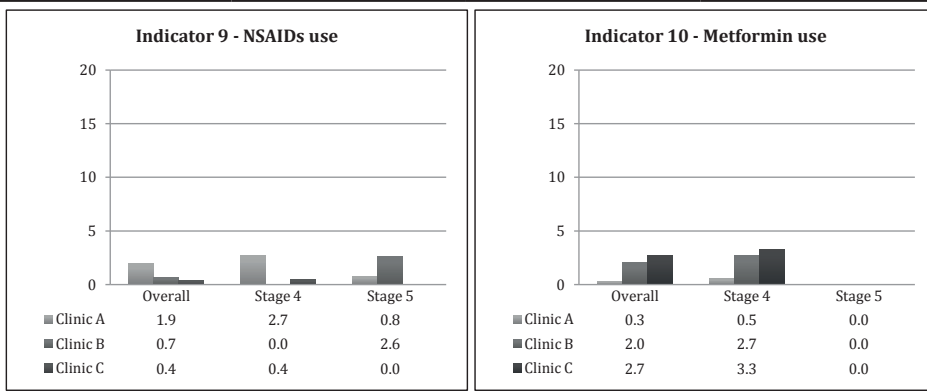
<i>Overall</i>	p-value χ^2	<i>Overall</i>	p-value χ^2
Clinic A vs. Clinic B	0.016	Clinic A vs. Clinic B	0.218 [†]
Clinic A vs. Clinic C	0.030	Clinic A vs. Clinic C	0.612 [†]
Clinic B vs. Clinic C	0.849	Clinic B vs. Clinic C	0.530 [†]
<i>CKD stage 3a</i>		<i>CKD stage 3a</i>	
Clinic A vs. Clinic B	1.000 [†]	Clinic A vs. Clinic B	0.323 [†]
Clinic A vs. Clinic C	1.000 [†]	Clinic A vs. Clinic C	0.558 [†]
Clinic B vs. Clinic C	1.000 [†]	Clinic B vs. Clinic C	0.521 [†]
<i>CKD stage 3b</i>		<i>CKD stage 3b</i>	
Clinic A vs. Clinic B	0.650 [†]	Clinic A vs. Clinic B	No prescriptions
Clinic A vs. Clinic C	1.000 [†]	Clinic A vs. Clinic C	No prescriptions
Clinic B vs. Clinic C	0.692 [†]	Clinic B vs. Clinic C	No prescriptions
<i>CKD stage 4</i>		<i>CKD stage 4</i>	
Clinic A vs. Clinic B	0.191	Clinic A vs. Clinic B	1.000 [†]
Clinic A vs. Clinic C	0.548	Clinic A vs. Clinic C	0.391 [†]
Clinic B vs. Clinic C	0.620	Clinic B vs. Clinic C	No prescriptions
<i>CKD stage 5</i>		<i>CKD stage 5</i>	
Clinic A vs. Clinic B	0.067	Clinic A vs. Clinic B	No prescriptions
Clinic A vs. Clinic C	0.013	Clinic A vs. Clinic C	No prescriptions
Clinic B vs. Clinic C	0.575	Clinic B vs. Clinic C	No prescriptions

Table S4.3: Differences between outpatient clinics per indicator stratified for CKD stage (continued)



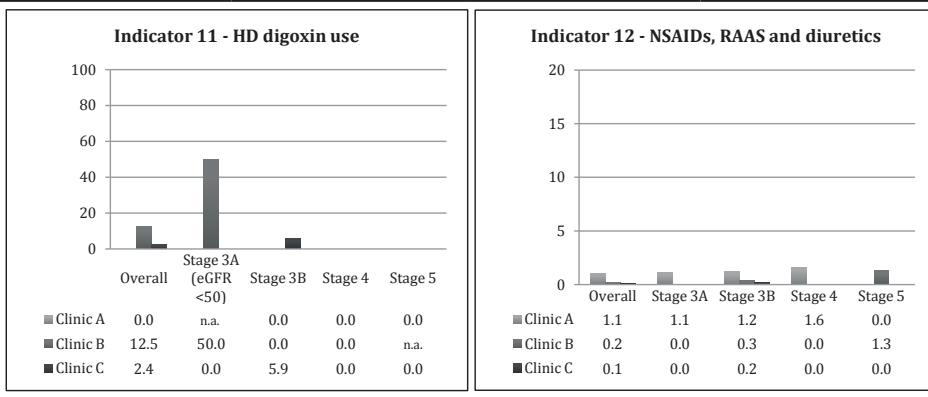
<i>Overall</i>	p-value χ^2	<i>Overall</i>	p-value χ^2
Clinic A vs. Clinic B	0.321	Clinic A vs. Clinic B	0.034
Clinic A vs. Clinic C	0.105	Clinic A vs. Clinic C	0.100
Clinic B vs. Clinic C	0.779 [†]	Clinic B vs. Clinic C	0.375
<i>CKD stage 3a</i>		<i>CKD stage 3a</i>	
Clinic A vs. Clinic B	No prescriptions	Clinic A vs. Clinic B	0.469 [†]
Clinic A vs. Clinic C	No prescriptions	Clinic A vs. Clinic C	0.417 [†]
Clinic B vs. Clinic C	No prescriptions	Clinic B vs. Clinic C	1.000 [†]
<i>CKD stage 3b</i>		<i>CKD stage 3b</i>	
Clinic A vs. Clinic B	1.000 [†]	Clinic A vs. Clinic B	0.562 [†]
Clinic A vs. Clinic C	0.466 [†]	Clinic A vs. Clinic C	0.637 [†]
Clinic B vs. Clinic C	0.364 [†]	Clinic B vs. Clinic C	0.678 [†]
<i>CKD stage 4</i>		<i>CKD stage 4</i>	
Clinic A vs. Clinic B	0.203 [†]	Clinic A vs. Clinic B	0.864
Clinic A vs. Clinic C	0.642	Clinic A vs. Clinic C	0.558
Clinic B vs. Clinic C	0.263 [†]	Clinic B vs. Clinic C	0.398
<i>CKD stage 5</i>		<i>CKD stage 5</i>	
Clinic A vs. Clinic B	1.000 [†]	Clinic A vs. Clinic B	1.000 [†]
Clinic A vs. Clinic C	0.567 [†]	Clinic A vs. Clinic C	0.548
Clinic B vs. Clinic C	1.000 [†]	Clinic B vs. Clinic C	0.473

Table S4.3: Differences between outpatient clinics per indicator stratified for CKD stage (continued)



<i>Overall</i>	p-value χ^2	<i>Overall</i>	p-value χ^2
Clinic A vs. Clinic B	0.287 [†]	Clinic A vs. Clinic B	0.062
Clinic A vs. Clinic C	0.028 [†]	Clinic A vs. Clinic C	0.013
Clinic B vs. Clinic C	0.612 [†]	Clinic B vs. Clinic C	0.558
<i>CKD stage 4</i>		<i>CKD stage 4</i>	
Clinic A vs. Clinic B	0.019 [†]	Clinic A vs. Clinic B	0.132 [†]
Clinic A vs. Clinic C	0.022 [†]	Clinic A vs. Clinic C	0.050 [†]
Clinic B vs. Clinic C	1.000 [†]	Clinic B vs. Clinic C	0.714
<i>CKD stage 5</i>		<i>CKD stage 5</i>	
Clinic A vs. Clinic B	0.557 [†]	Clinic A vs. Clinic B	No prescriptions
Clinic A vs. Clinic C	1.000 [†]	Clinic A vs. Clinic C	No prescriptions
Clinic B vs. Clinic C	0.189 [†]	Clinic B vs. Clinic C	No prescriptions

Table S4.3: Differences between outpatient clinics per indicator stratified for CKD stage (continued)



<i>Overall</i>		p-value χ^2	<i>Overall</i>	p-value χ^2
Clinic A vs. Clinic B		1.000 [†]	Clinic A vs. Clinic B	0.067 [†]
Clinic A vs. Clinic C		1.000 [†]	Clinic A vs. Clinic C	0.001 [†]
Clinic B vs. Clinic C		0.202 [†]	Clinic B vs. Clinic C	0.254 [†]
<i>CKD stage 3a</i>			<i>CKD stage 3a</i>	
Clinic A vs. Clinic B		No prescriptions	Clinic A vs. Clinic B	0.265 [†]
Clinic A vs. Clinic C		No prescriptions	Clinic A vs. Clinic C	0.156 [†]
Clinic B vs. Clinic C		0.333 [†]	Clinic B vs. Clinic C	No prescriptions
<i>CKD stage 3b</i>			<i>CKD stage 3b</i>	
Clinic A vs. Clinic B		No prescriptions	Clinic A vs. Clinic B	0.295 [†]
Clinic A vs. Clinic C		1.000 [†]	Clinic A vs. Clinic C	0.104 [†]
Clinic B vs. Clinic C		1.000 [†]	Clinic B vs. Clinic C	0.521 [†]
<i>CKD stage 4</i>			<i>CKD stage 4</i>	
Clinic A vs. Clinic B		No prescriptions	Clinic A vs. Clinic B	0.093 [†]
Clinic A vs. Clinic C		No prescriptions	Clinic A vs. Clinic C	0.023 [†]
Clinic B vs. Clinic C		No prescriptions	Clinic B vs. Clinic C	1.000 [†]
<i>CKD stage 5</i>			<i>CKD stage 5</i>	
Clinic A vs. Clinic B		No prescriptions	Clinic A vs. Clinic B	0.373 [†]
Clinic A vs. Clinic C		No prescriptions	Clinic A vs. Clinic C	No prescriptions
Clinic B vs. Clinic C		No prescriptions	Clinic B vs. Clinic C	0.437 [†]

CKD: chronic kidney disease; RAAS: renin-angiotensin-aldosterone system; ESA: erythropoiesis-stimulating agent; NSAID: non-steroidal anti-inflammatory drug.

Clinic A and B: university nephrology outpatient clinics; clinic C: non-university nephrology outpatient clinic.

† Fisher's exact because of <5 expected number of patients in one or more cells.