

Section 2.1 Logic model

5611e Rate of Annual Kidney Health Evaluation Among Adults with Diabetes and/or Hypertension

Percentage of patients aged 18-85 years with a diagnosis of diabetes and/or hypertension who received a kidney health evaluation defined by an Estimated Glomerular Filtration Rate (eGFR) AND Urine Albumin-Creatinine Ratio (uACR) within the measurement period

Summary: Patients with a diagnosis of diabetes and/or hypertension are at increased risk of developing CKD and an annual kidney health evaluation using eGFR and uACR allows clinicians to identify and potentially treat or delay its progression. In addition, by increasing performance on these tests it will address the issues of under-recognition and under-diagnosis as many patients are not aware of their own kidney health status and/or a diagnosis of CKD.

Inputs	Activities	Outputs	Outcomes & Impacts
Quality improvement activities such as multidisciplinary teams, clinician and staff education based on clinical recommendations, and tracking of performance against a dashboard Tools and technology integration such as automated order sets in the electronic health record system (EHRs) Patient education materials	Implementation of quality improvement activities and tools and technology integration Delivery of patient education materials	Number of patients whose kidney health has not been evaluated within the last 12 months Number of clinical interventions due to eGFR and uACR results Number of patient education materials distributed	<u>Short-term</u> Increased clinician and patient awareness Diagnosis and early treatment for CKD Ability of the practice to track interventions and progress toward appropriate and timely diagnosis of kidney disease <u>Intermediate-term</u> Improved clinician documentation and use of tools and technology (e.g., automated order sets) Slowed progression of kidney disease Reduction of cardiovascular disease <u>Long-term</u> Decrease incidence of progression to kidney failure and cardiovascular disease Decrease in unnecessary costs

Section 2.4 Performance Gap

Table 1: Mean performance scores by decile, clinician-level, 2025, sample size >=20

	Overall	Min	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10	Max
Mean Performance Score	24.59%	0.00%	8.69%	15.53%	16.81%	19.70%	22.86%	26.29%	27.96%	33.57%	37.91%	44.43%	52.63%
N of Entities	82	1	9	8	7	9	8	9	8	7	9	8	1
N of Persons / Encounters / Episodes	4,725	20	482	1,119	257	258	315	557	377	307	432	621	403

Table 2: Distribution of performance scores, group-level, 2025

# of Clinics	# of patients	Min	P10	P25	Median	P75	P90	Max	Mean	Std Deviation
6	7,885	14.28%	14.28%	14.37%	24.56%	33.65%	34.84%	34.84%	24.38%	0.0893

Section 3.1 Contributions Toward Closing Care Gaps

Table 3. Mean performance score performance score overall (i.e., all patients with diabetes), and by patient's characteristics (sex, race, and Hispanic), hypertension status, type of insurance, and clinics, clinician-level, 2025

	Denominator	Numerator	Performance score	P-value
	N	N	%	
Total	7,885	1,875	23.8	
Stratification Variables				
Hypertension				0.4071
Yes	6,613	1,561	23.6	
No	1,272	314	24.7	
Sex				0.002
Female	4,736	1,069	22.6	
Male	3,149	806	25.6	
Race				0.0302
White	1,871	429	22.9	
Black	3,033	679	22.4	
Asian	575	154	26.8	
Multi Races	1,555	395	25.4	
Others	851	218	25.6	
Hispanic				0.6281
Hispanic	1,720	420	24.4	
Non Hispanic	5,061	1,186	23.4	

	Denominator	Numerator	Performance score	P-value
	N	N	%	
Others	1,104	269	24.4	
Payer				0.1331
Commercial Insurance	1,966	505	25.7	
Managed Medicaid	1,111	249	22.4	
Managed Medicare	905	210	23.2	
Medicaid	2,409	555	23.0	
Medicare	1,479	355	24.0	
Others	15	1	6.7	
Clinics				<0.0001
Clinic 1	835	120	14.4	
Clinic 2	1,386	198	14.3	
Clinic 3	3,240	771	23.8	
Clinic 4	537	136	25.3	
Clinic 5	1,260	439	34.8	
Clinic 6	627	211	33.7	

Section 5.1.4 Characteristics of Units of the Eligible Population

Table 4. Characteristics of denominators

	Denominator	Numerator	P-value
	N	N	
Total	7,885	1,875	
Stratification Variables			
Hypertension			0.4071
Yes	6,613	1,561	
No	1,272	314	
Sex			0.002
Female	4,736	1,069	
Male	3,149	806	
Race			0.0302
White	1,871	429	
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Others	15	1	
Clinics			<0.0001
Clinic 1	835	120	
Clinic 2	1,386	198	
Clinic 3	3,240	771	
Clinic 4	537	136	
Clinic 5	1,260	439	
Clinic 6	627	211	

Section 5.2.3 Reliability Testing Results

Table 5: Reliability by denominator decile, clinician-level, 2025, sample size >= 20

	Overall	Min	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10	Max
Reliability	0.6920	0.4829									0.5878	0.7794	0.9547
Mean Performance Score	24.59%	3.85%									22.89%	25.98%	45.88%
N of Entities	68	1									31	37	1
N of Persons / Encounters / Episodes	4,480	21									892	3,588	342

Note on Table 5: The sample size (i.e., N of persons per entity) is calculated based on number of persons with both diabetes and hypertension. As a result, total 68 entities are included for this table.

Table 6: Reliability by reliability score decile, clinician-level, 2025, sample size >= 20

	Overall	Min	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10	Max
Reliability	0.6920	0.4829	0.5022	0.5397	0.5802	0.6213	0.6722	0.7195	0.7561	0.7928	0.8392	0.9279	0.9547

Table 7: Distribution of reliability, group-level, 2025

# of Clinics	# of patients	Min	P10	P25	Median	P75	P90	Max	Mean	Std Deviation
6	7,885	0.948	0.948	0.949	0.976	0.987	0.991	0.992	0.971	0.0186

Section 5.3.4 Validity Testing Results

Table 8. Validity testing on data elements

Data element		Manual abstraction (gold standard)	EHR automated report	Percentage of agreement^	Kappa	Sensitivity %	Specificity %	PPV %	NPV %
Elements for Supplemental Data	Ethnicity	100.00	100.00	100.00		100.00	n.a.	100.00	n.a.
	Payer	100.00	100.00	100.00		100.00	n.a.	100.00	n.a.
	Race	100.00	100.00	100.00		100.00	n.a.	100.00	n.a.
	Sex/Gender	100.00	100.00	100.00		100.00	n.a.	100.00	n.a.
	Age	100.00	100.00	100.00		100.00	n.a.	100.00	n.a.
Elements for Initial Population	Diabetes diagnosis	53.57	52.38	98.81	0.976	97.78	100.00	100.00	97.50
	Hypertension diagnosis	90.48	90.48	97.62	0.862	98.68	87.50	98.68	87.50
	At least 1 outpatient visit	100.00	100.00	100.00		100.00	n.a.	100.00	n.a.
Elements for Denominator Exclusions	CKD Stage 5	100.00	100.00	100.00		100.00	n.a.	100.00	n.a.
	ESRD	100.00	100.00	100.00		100.00	n.a.	100.00	n.a.
	Hospice	100.00	100.00	100.00		100.00	n.a.	100.00	n.a.
	Palliative Care	100.00	100.00	100.00		100.00	n.a.	100.00	n.a.
Elements for Numerator	eGFR	100.00	100.00	100.00		100.00	n.a.	100.00	n.a.
	UACR	35.71	28.57	88.10	0.729	73.33	96.30	91.67	86.67

^Agreement: "Yes" for manual abstraction and "1" for the electronic report OR "No" for manual abstraction and "0" for the electronic report.