



Supplementary Fig. 1. Venn diagram showing number of participants meeting criteria for diabetes by ICD codes, medications, and/or laboratory values.

Supplementary Table 1. Characteristics of VA Veterans diagnosed with diabetes and COVID-19, stratified by calendar quarter of SARS-CoV-2 infection

	Overall		Jan.–March 2020		April–June 2020		July–September 2020		Oct.–Dec. 2020		Jan.–March 2021		p
	n	%	n	%	n	%	n	%	n	%	n	%	
A1c, %													<0.001
<7	32692	50%	480	52%	3366	51%	5014	49%	14285	50%	9547	51%	
7-7.9	15067	23%	198	22%	1415	21%	2265	22%	6813	24%	4376	23%	
8-8.9	8079	12%	91	10%	839	13%	1317	13%	3495	12%	2337	12%	
≥9	9056	14%	149	16%	1026	15%	1536	15%	3709	13%	2636	14%	
Metformin	29685	46%	395	43%	2626	40%	4631	46%	13329	47%	8704	46%	<0.001
Sulfonylurea	12298	19%	151	16%	1052	16%	1906	19%	5532	20%	3657	19%	<0.001
Thiazolidinedione	2075	3%	16	2%	183	3%	331	3%	907	3%	638	3%	0.007
DPP4i	5810	9%	85	9%	491	7%	880	9%	2596	9%	1758	9%	<0.001
GLP1-RA	4737	7%	58	6%	323	5%	658	6%	2200	8%	1498	8%	<0.001
SGLT2i	5542	9%	49	5%	352	5%	777	8%	2553	9%	1811	10%	<0.001
Insulin	18521	29%	243	26%	1698	26%	2941	29%	8162	29%	5477	29%	<0.001
Sex at birth, female	3872	6%	54	6%	421	6%	676	7%	1599	6%	1122	6%	0.012
Age category, years													<0.001
19-39	1296	2%	15	2%	134	2%	246	2%	603	2%	298	2%	
40-49	3523	5%	57	6%	341	5%	643	6%	1572	6%	910	5%	
50-59	10238	16%	167	18%	1004	15%	1760	17%	4477	16%	2830	15%	
60-69	16506	25%	258	28%	1806	27%	2709	27%	7044	25%	4689	25%	
70-79	25277	39%	308	34%	2347	35%	3706	37%	11237	40%	7679	41%	
≥80	8054	12%	113	12%	1014	15%	1068	11%	3369	12%	2490	13%	
White (vs not white)	42553	66%	318	35%	3467	52%	6115	60%	20024	71%	12629	67%	<0.001
Black vs (not Black)	17255	27%	553	60%	2749	41%	3229	32%	5984	21%	4740	25%	<0.001
Hispanic (vs not Hispanic)	5812	9%	93	10%	634	10%	1223	12%	2278	8%	1584	8%	<0.001
Body-mass index category,													<0.001
<18.5	268	1%	6	1%	54	1%	39	0%	91	0%	78	1%	
18.5-24.9	5185	10%	105	12%	790	13%	831	9%	2007	9%	1452	10%	
25-29.9	14265	27%	249	29%	1693	29%	2382	27%	6090	27%	3851	27%	
30-34.9	16266	31%	257	30%	1698	29%	2784	31%	7133	31%	4394	31%	
35-39.9	9909	19%	157	18%	1041	18%	1709	19%	4422	19%	2580	18%	
≥ 40	6617	13%	97	11%	644	11%	1105	12%	3017	13%	1754	12%	
Tobacco use													<0.001
Never	17381	27%	210	23%	1532	23%	2894	29%	7469	26%	5276	28%	
Former	31466	48%	477	52%	3340	50%	4614	46%	14082	50%	8953	47%	
Current	16047	25%	231	25%	1774	27%	2624	26%	6751	24%	4667	25%	
ACEi	22084	34%	281	31%	1998	30%	3379	33%	9830	35%	6596	35%	<0.001
ARB	12524	19%	170	19%	1139	17%	1970	19%	5567	20%	3678	19%	<0.001
Statin	42083	65%	566	62%	3817	57%	6417	63%	18717	66%	12566	67%	<0.001
Platelet inhibitor	17825	27%	287	31%	1844	28%	2850	28%	7655	27%	5189	27%	0.008
Hypertension	57879	89%	815	89%	6027	91%	9002	89%	25174	89%	16861	89%	0.001
Cardiovascular disease	38394	59%	564	61%	4207	63%	5741	57%	16773	59%	11109	59%	<0.001
Congestive heart failure	12587	19%	218	24%	1566	24%	1878	19%	5417	19%	3508	19%	<0.001

Supplementary Table 1 CONTINUED. Characteristics of VA Veterans diagnosed with diabetes and COVID-19, stratified by calendar quarter of SARS-CoV-2 infection

Estimated glomerular filtration rate, ml/min/1.73 m ²													<0.001
≥ 90	11733	20%	165	19%	1195	20%	1924	21%	5175	21%	3274	20%	
60-89	25576	44%	385	43%	2557	42%	4088	44%	11173	44%	7373	44%	
45-59	11096	19%	170	19%	1091	18%	1734	19%	4864	19%	3237	19%	
30-44	5906	10%	83	9%	661	11%	893	10%	2572	10%	1697	10%	
15-29	2204	4%	33	4%	315	5%	350	4%	867	3%	639	4%	
<15 or dialysis	1595	3%	52	6%	274	4%	268	3%	572	2%	429	3%	
Urban/rural/highly rural residence													<0.001
Highly rural	739	1%	0	0%	40	1%	96	1%	432	2%	171	1%	
Rural	19974	31%	79	9%	1181	18%	3087	30%	9599	34%	6028	32%	
Urban	44154	68%	839	91%	5423	82%	6942	69%	18257	65%	12693	67%	
Unknown	27	0%	0	0%	2	0%	7	0%	14	0%	4	0%	
OUTCOMES													
Hospital admission w/in 30 days	13315	21%	404	44%	1665	25%	2194	22%	5543	20%	3509	19%	<0.001
ICU admission w/in 30 days	4265	7%	197	21%	615	9%	744	7%	1731	6%	978	5%	<0.001
Death w/in 30 days	4943	8%	172	19%	775	12%	726	7%	2135	8%	1135	6%	<0.001
Death by 3/10/2021	6931	11%	212	23%	1278	19%	1212	12%	2874	10%	1355	7%	<0.001

Data are presented as n (%) for categorical variables

Supplementary Table 2. ICU and mortality outcomes by category of hemoglobin A1c

	Hemoglobin A1c category										p
	Overall		<7%		7–7.9%		8–8.9%		≥9%		
	n	%	n	%	n	%	n	%	n	%	
Outcomes among all participants (n=64,894)											
Admitted to ICU within 30 days of index date	4265	7%	2105	6%	947	6%	533	7%	680	8%	0.001
Died within 30 days	4943	8%	2516	8%	1164	8%	614	8%	649	7%	0.073
Died over all follow-up time	6931	11%	3593	11%	1584	11%	854	11%	900	10%	<0.001
Mean days until death	35.8	±51.2	37	±52.2	33.3	±47.8	35.3	±51.1	35.8	±53.1	0.055
Outcomes among individuals admitted to ICU (n=4265)											
Died within 30 days within 30 days of index date	1316	31%	654	31%	318	34%	154	29%	190	28%	0.073
Died over all follow-up time	1668	39%	838	40%	382	40%	198	37%	250	37%	<0.001
Mean days until death	27.4	±36.9	28.1	±37.9	25.3	±34.7	26.6	±30.6	29	±40.8	0.055

Data are presented as n (%) for categorical variables and mean (SD) for continuous variables