

Table 3.4: Biochemical Specimen Availability

	Serum					Serum, Zinc - Free*	EDTA Plasma			Heparin Plasma			RBC			
	Any	T0	No. Years Avail				Any	No. Years Avail		Any	T0	No. Years Avail	Any	T0	No. Years Avail	
			2+	3+	4+			2+	3+						2+	3+
<i>Chronic Condition</i>																
<i>Has CMS Chronic Condition Data</i>	13110	12071	12747	12089	9757	11679	11962	10577	8055	12812	11844	9417	13449	12425	11974	9198
<i>Alzheimers Disease and Related Disorders or Senile Dementia</i>	1323	1229	1282	1196	845	1183	1155	932	682	1291	1198	840	1354	1260	1142	804
<i>Alzheimers Disease</i>	429	396	414	380	275	383	374	305	231	417	384	276	436	400	364	255
<i>Acute Myocardial Infarction (Heart Attack)</i>	724	670	704	658	489	658	632	534	383	706	657	483	751	698	639	450
<i>Anemia</i>	7108	6560	6903	6498	5056	6343	6357	5500	4087	6933	6428	4908	7361	6825	6423	4816
<i>Asthma</i>	1698	1537	1630	1518	1192	1471	1526	1325	983	1644	1507	1175	1743	1596	1538	1130
<i>Atrial Fibrillation</i>	2408	2239	2341	2203	1659	2143	2107	1800	1306	2356	2187	1605	2496	2331	2137	1568
<i>Cataracts</i>	10753	9924	10450	9890	7846	9589	9709	8509	6483	10518	9731	7598	11043	10221	9733	7385
<i>Congestive Heart Failure</i>	2939	2720	2853	2670	1975	2608	2566	2148	1549	2859	2660	1935	3031	2826	2581	1863
<i>Chronic Kidney Disease</i>	3430	3180	3341	3144	2412	3053	3065	2629	1913	3356	3110	2355	3559	3317	3114	2307
<i>Chronic Obstructive Pulmonary Disease and Bronchiectasis</i>	2798	2567	2702	2522	1949	2484	2473	2117	1546	2720	2499	1877	2895	2689	2501	1846
<i>Depression</i>	3213	2965	3113	2934	2301	2854	2889	2500	1878	3130	2887	2220	3295	3062	2900	2169
<i>Diabetes</i>	3724	3427	3609	3381	2701	3305	3388	2940	2148	3637	3358	2581	3855	3557	3403	2579
<i>Glaucoma</i>	3776	3479	3669	3490	2720	3362	3396	2971	2235	3679	3407	2646	3870	3568	3396	2566
<i>Hip Pelvic Fracture</i>	427	394	416	383	281	378	370	312	221	417	386	276	440	412	369	272
<i>Hyperlipidemia</i>	10617	9791	10312	9765	7840	9477	9649	8487	6434	10382	9600	7568	10893	10082	9667	7383
<i>Benign Prostatic Hyperplasia</i>	3374	3166	3309	3131	2372	3069	2974	2580	1906	3310	3101	2319	3496	3292	3040	2337
<i>Hypertension</i>	10311	9514	10016	9472	7545	9191	9327	8170	6148	10081	9330	7278	10599	9816	9351	7118
<i>Acquired Hypothyroidism</i>	3599	3298	3481	3290	2629	3197	3235	2861	2181	3522	3252	2545	3699	3412	3231	2459
<i>Ischemic Heart Disease</i>	6237	5791	6055	5705	4440	5578	5561	4815	3554	6093	5668	4299	6415	5965	5579	4196
<i>Osteoporosis</i>	3138	2904	3016	2848	2233	2797	2802	2436	1821	3069	2846	2171	3220	2986	2793	2107
<i>Rheumatoid Arthritis/Osteoarthritis</i>	8251	7630	8018	7589	6045	7379	7466	6544	4959	8072	7484	5848	8482	7876	7478	5696
<i>Stroke / Transient Ischemic Attack</i>	1881	1748	1823	1710	1258	1685	1657	1379	991	1836	1703	1214	1936	1805	1667	1188

Specimen availability based on biochemical consent and no rare cancer. *EEMS guidelines reserve Zinc-free vial unless given special permission.

Serum/Plasma are available if there are 2+ parent vials that did not undergo an uncontrolled thaw in a study year, or if .1+ mL of material from aliquots are available. (T4 Plasma being the exception as before).

Table 3.5: Specimen Availability by Race, Gender and Smoking History for Chronic Conditions

Chronic Condition	Race								Gender				Smoking History					
	White		Black		Hispanic		Other		Female		Male		Former		Never		Current	
	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA
<i>Has CMS Chronic Condition Data</i>	11910	23402	310	554	179	333	711	1628	6606	13351	6504	12566	5714	11551	6447	12587	949	1779
<i>Alzheimers Disease and Related Disorders or Senile Dementia</i>	1209	2227	34	61	17	29	63	155	665	1283	658	1189	552	1069	674	1232	97	171
<i>Alzheimers Disease</i>	391	703	9	16	5	8	24	55	215	408	214	374	177	329	224	406	28	47
<i>Acute Myocardial Infarction (Heart Attack)</i>	667	1246	16	24	8	12	33	71	232	447	492	906	357	681	307	563	60	109
<i>Anemia</i>	6415	12676	218	402	98	192	377	894	3703	7550	3405	6614	3134	6411	3446	6768	528	985
<i>Asthma</i>	1512	2970	42	88	24	48	120	267	1021	2082	677	1291	767	1613	780	1498	151	262
<i>Atrial Fibrillation</i>	2271	4560	33	67	18	46	86	199	987	2078	1421	2794	1138	2330	1115	2231	155	311
<i>Cataracts</i>	9837	19403	220	407	127	256	569	1311	5743	11600	5010	9777	4629	9480	5385	10500	739	1397
<i>Congestive Heart Failure</i>	2683	5207	94	178	39	67	123	283	1314	2691	1625	3044	1419	2760	1263	2513	257	462
<i>Chronic Kidney Disease</i>	3103	5991	97	194	51	99	179	422	1479	3012	1951	3694	1592	3159	1567	3032	271	515
<i>Chronic Obstructive Pulmonary Disease and Bronchiectasis</i>	2551	4990	87	146	38	65	122	294	1413	2836	1385	2659	1410	2823	872	1718	516	954
<i>Depression</i>	3009	5842	54	99	37	80	113	266	2075	4148	1138	2139	1336	2744	1571	3003	306	540
<i>Diabetes</i>	3234	6280	148	274	72	128	270	592	1653	3375	2071	3899	1719	3410	1699	3311	306	553
<i>Glaucoma</i>	3294	6567	148	267	53	99	281	631	2064	4296	1712	3268	1587	3282	1936	3796	253	486
<i>Hip Pelvic Fracture</i>	405	820	7	12	2	5	13	24	284	567	143	294	173	368	218	428	36	65
<i>Hyperlipidemia</i>	9575	18876	260	462	142	266	640	1459	5330	10893	5287	10170	4711	9538	5129	10050	777	1475
<i>Benign Prostatic Hyperplasia</i>	3026	5844	80	136	52	108	216	510	.	.	3374	6598	1723	3450	1407	2687	244	461
<i>Hypertension</i>	9312	18239	275	504	146	277	578	1337	5146	10412	5165	9945	4606	9252	4933	9676	772	1429
<i>Acquired Hypothyroidism</i>	3321	6662	71	159	43	86	164	358	2487	5102	1112	2163	1507	3082	1879	3747	213	436
<i>Ischemic Heart Disease</i>	5670	11056	164	318	82	152	321	732	2704	5561	3533	6697	2908	5791	2829	5535	500	932
<i>Osteoporosis</i>	2844	5655	57	109	27	72	210	457	2739	5504	399	789	1145	2368	1788	3518	205	407
<i>Rheumatoid Arthritis/Osteoarthritis</i>	7586	15064	199	368	97	190	369	851	4602	9441	3649	7032	3581	7363	4131	8091	539	1019
<i>Stroke / Transient Ischemic Attack</i>	1702	3358	54	99	22	41	103	253	897	1867	984	1884	840	1709	888	1760	153	282

'Other' Race: Asians, Pacific Islanders, American Indians, Unknown. 'Other' Smoking: Unknown or Ambiguous. DNA Availability is based on Source DNA, extracted DNA and DNA Pending Extraction. Serum Availability is based on having 2+ parent vials that did not undergo an uncontrolled thaw in a study year, or if .1+ mL of material from aliquots are available.

Table 3.6: Specimen Availability by Confirmed Cancer of Interest for Chronic Conditions

<i>Chronic Condition</i>	<i>Cancer of interest</i>																	
	<i>Prostate</i>		<i>Lung</i>		<i>Colon</i>		<i>Ovarian</i>		<i>Pancreatic</i>		<i>Melanoma</i>		<i>Bladder</i>		<i>Breast</i>		<i>Hematopoietic</i>	
	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>
<i>Has CMS Chronic Condition Data</i>	1179	2148	230	410	183	402	52	89	44	87	412	804	237	481	632	1251	390	759
<i>Alzheimers Disease and Related Disorders or Senile Dementia</i>	128	228	33	49	17	44	4	8	5	8	50	79	34	58	54	120	48	83
<i>Alzheimers Disease</i>	38	66	13	17	7	10	4	5	3	3	16	24	11	15	16	41	14	23
<i>Acute Myocardial Infarction (Heart Attack)</i>	82	151	24	36	15	42	6	7	5	7	22	35	20	37	20	32	31	52
<i>Anemia</i>	673	1242	163	294	133	287	44	72	34	69	221	429	149	307	393	771	305	596
<i>Asthma</i>	120	245	41	79	27	62	8	13	4	9	51	96	32	57	111	219	62	120
<i>Atrial Fibrillation</i>	248	482	55	109	54	108	8	13	8	19	91	181	64	134	108	235	100	205
<i>Cataracts</i>	953	1740	202	358	156	344	45	79	35	72	348	677	200	418	556	1098	324	636
<i>Congestive Heart Failure</i>	286	536	70	127	58	133	16	22	11	21	92	175	72	149	126	267	130	250
<i>Chronic Kidney Disease</i>	378	686	73	140	80	160	20	38	17	33	123	226	113	216	138	282	155	306
<i>Chronic Obstructive Pulmonary Disease and Bronchiectasis</i>	232	431	135	245	59	106	7	12	12	18	80	147	77	147	149	292	122	225
<i>Depression</i>	206	385	70	122	58	110	15	26	14	25	91	184	73	132	198	408	95	195
<i>Diabetes</i>	358	644	79	133	62	147	16	25	18	35	108	214	96	176	146	324	129	235
<i>Glaucoma</i>	340	613	60	108	57	117	18	31	15	27	119	243	82	141	204	420	106	218
<i>Hip Pelvic Fracture</i>	31	70	9	18	10	19	1	3	2	6	16	28	7	25	25	47	19	40
<i>Hyperlipidemia</i>	976	1779	196	356	150	330	39	68	37	75	354	672	201	402	530	1019	329	625
<i>Benign Prostatic Hyperplasia</i>	585	1093	69	125	59	126	.	.	12	23	147	290	126	252	.	.	128	253
<i>Hypertension</i>	950	1740	203	358	164	342	35	63	35	74	334	659	209	410	489	981	325	618
<i>Acquired Hypothyroidism</i>	211	394	56	109	62	122	22	31	11	26	111	212	45	119	230	472	117	226
<i>Ischemic Heart Disease</i>	667	1199	153	277	110	237	23	37	24	44	202	380	160	295	264	517	225	425
<i>Osteoporosis</i>	96	183	59	111	43	97	23	32	11	23	87	171	34	76	269	548	101	197
<i>Rheumatoid Arthritis/Osteoarthritis</i>	691	1294	148	269	118	253	31	57	32	61	273	520	146	315	435	897	262	514
<i>Stroke / Transient Ischemic Attack</i>	184	319	50	86	40	66	7	13	7	12	63	118	54	99	69	156	53	112

DNA Availability is based on Source DNA, extracted DNA and DNA Pending Extraction.

Serum Availability is based on prediagnostic availability - 2+ parent vials that did not undergo an uncontrolled thaw in a study year, or if .1+ mL of material from aliquots are available.

Table 3.6: Specimen Availability by Confirmed Cancer of Interest for Chronic Conditions

<i>Chronic Condition</i>	<i>Cancer of interest</i>																	
	<i>Endometrial</i>		<i>Glioma</i>		<i>Renal</i>		<i>Thyroid</i>		<i>Head and Neck</i>		<i>Liver</i>		<i>Upper GI</i>		<i>Biliary</i>		<i>Male Breast</i>	
	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>	<i>Serum</i>	<i>DNA</i>
<i>Has CMS Chronic Condition Data</i>	94	210	15	32	100	203	46	97	74	140	17	32	46	95	14	23	8	15
<i>Alzheimers Disease and Related Disorders or Senile Dementia</i>	9	17	0	2	7	18	4	11	9	17	0	2	2	6	0	0	.	.
<i>Alzheimers Disease</i>	4	6	.	.	1	5	3	5	1	3	0	1	1	2
<i>Acute Myocardial Infarction (Heart Attack)</i>	2	3	.	.	8	16	1	5	4	7	1	1	3	5	.	.	2	3
<i>Anemia</i>	56	124	9	21	78	151	31	66	46	88	12	25	38	76	11	18	6	13
<i>Asthma</i>	14	31	2	4	16	35	10	22	12	21	5	6	9	18	2	3	0	1
<i>Atrial Fibrillation</i>	16	39	4	8	29	56	13	25	20	43	5	9	13	25	3	5	2	4
<i>Cataracts</i>	83	185	14	28	80	166	34	77	58	114	13	27	40	81	11	18	8	15
<i>Congestive Heart Failure</i>	19	39	5	10	35	67	18	30	24	47	2	3	17	29	4	7	2	5
<i>Chronic Kidney Disease</i>	23	52	6	16	86	173	20	35	24	44	5	13	24	41	5	8	2	4
<i>Chronic Obstructive Pulmonary Disease and Bronchiectasis</i>	16	41	4	10	30	64	14	28	32	57	3	5	22	34	4	5	3	4
<i>Depression</i>	33	65	6	12	22	50	18	34	18	44	5	10	16	27	5	6	0	3
<i>Diabetes</i>	30	60	2	8	44	83	13	26	21	39	5	12	19	39	5	10	1	2
<i>Glaucoma</i>	27	59	7	11	28	68	16	34	13	31	6	11	9	23	5	7	1	2
<i>Hip Pelvic Fracture</i>	3	6	0	1	8	14	0	3	6	9	.	.	2	2	1	1	.	.
<i>Hyperlipidemia</i>	74	163	15	30	82	171	36	80	53	107	13	25	37	77	14	20	6	13
<i>Benign Prostatic Hyperplasia</i>	.	.	5	12	41	89	8	16	31	62	3	8	23	40	3	6	6	11
<i>Hypertension</i>	75	160	13	28	93	188	37	81	59	114	15	27	40	74	13	22	5	11
<i>Acquired Hypothyroidism</i>	35	74	5	11	29	63	40	81	20	43	4	9	12	25	8	11	0	2
<i>Ischemic Heart Disease</i>	38	85	8	17	62	128	25	51	34	74	6	12	26	50	9	15	7	13
<i>Osteoporosis</i>	33	79	3	6	20	36	10	24	14	33	6	8	12	23	4	5	1	3
<i>Rheumatoid Arthritis/Osteoarthritis</i>	67	151	11	22	65	127	30	71	49	85	9	22	32	53	9	16	4	9
<i>Stroke / Transient Ischemic Attack</i>	12	22	3	6	10	25	6	15	18	26	3	5	7	14	0	0	1	1

DNA Availability is based on Source DNA, extracted DNA and DNA Pending Extraction.

Serum Availability is based on prediagnostic availability - 2+ parent vials that did not undergo an uncontrolled thaw in a study year, or if .1+ mL of material from aliquots are available.