

PROJECTIONS OF LONG TERM CARE NEEDS IN INDIAN HEALTH SERVICE AREAS



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PROJECTIONS OF LONG TERM CARE NEEDS IN IHS AREAS

The enclosed tables represent an application of area specific rates of functional limitation to the population projections for each service area. This results in a series of tables estimating the numbers of persons at each level of functional limitation that will be present in the Native American population now and in the future. This analysis simply extends the analysis done on a national scale last year and employs prevalence rates as well as population projections developed at the National Resource Center on Native American Aging.

Additionally, the projected population at each level of functional limitation for each projected year was submitted to a rate representing the national norm for type of care received. This norm was derived from data published by the Agency for Health Research and Quality regarding patterns of care. The result provides an estimate of the number of persons residing in community settings that would rely on informal care, a combination of formal and informal care or exclusively on formal caregivers. The resulting figure is useful for establishing just how much care would be required to achieve national levels of service and takes into account the enormous volume of informal caregiving that supports our older population in the United States. This is particularly valuable because it takes into account recognition that the network of formal services was never intended to accommodate all cases of activity limitation. These numbers allocate an enormous portion of the caregiving task to informal caregivers, and yet allow us to recognize the extent of under-service in the 11 Indian Health Service areas. (Note - Tucson was not included as our data base has no representation from that service area)

After acknowledging that Tucson is not represented, the cumulative profile projected for the remaining 11 service areas for 2010 will contain 107,018 persons residing in the communities with 1 or more functional limitation. Among this 107,018 persons, if national norms for care are

applied, there will be 38,088 receiving formal care in combination with informal care services from family and friends and an additional 6,833 persons depending exclusively on formal care.

We lack data on the precise numbers of formal services that are available to community residents and being used for each of these areas. Nursing home use was also estimated, in this case using a multiplier – a ratio of institutional residents in the national population to community residents at each level of severity for functional limitation. The ratios are 87 nursing home residents per 1000 community residents at the moderate level of limitation, 242 nursing homes residents per 1000 community residents at the moderately severe level of limitation and 1,027 nursing home residents per 1000 community residents at the severe level of limitation. These estimates are found in the fourth column of the population expected to receive care for each estimate year. The reader should keep in mind that these estimates are what would be expected if national norms were applied to the service area populations. They do not reflect actual numbers institutionalized.

These projections should be useful for planning purposes and for documenting the volume of present and future service needs while accounting for a normal level of informal caregiving. One should be cautious, however, as the areas with the smallest numbers of functional limitations also have the lowest life expectancies by a significant margin. Attention to long term care needs or health care in general must not be dictated strictly by demographic size. If it is, a self fulfilling prophecy will be realized.

Estimates of population with functional limitation and the numbers who would receive informal, formal or combined care using national norms.

Aberdeen Area

Level of Functional Limitation	Proportions receiving each type of care				
	Informal	Combined	Formal		
Moderate	0.659	0.271	0.071		
Moderately severe	0.584	0.333	0.083		
Severe	0.44	0.519	0.041		
Aberdeen Area rates					
Rates for functional limitations					
Age group	Moderate	M. Severe	Severe		
55-64	0.197	0.072	0.075		
65-74	0.207	0.054	0.093		
75 & over	0.254	0.061	0.142		
Population values for Aberdeen Area					
Population					
Age Group	2000	2005	2010	2015	2020
55-64	4262	5077	6189	7195	8099
65-74	2655	2862	3150	3771	4593
75 & over	1608	1739	1838	1973	2147
Estimates for 2000 lfd pop					
	Moderate	M. Severe	Severe		
55-64	840	307	320		
65-74	549	143	247		
75 & over	408	98	228		
Total	1798	548	795		
Grand total	3141				
Population 2000 expected to receive care at each level when applying national rates for caregiving					
	Informal	Combined	Formal	Institutional	
Moderate	1185	487	128	156	
Moderately severe	320	183	46	123	
Severe	350	413	33	824	
Totals	1855	1082	206	1104	
Estimates for 2005 lfd pop					
	Moderate	M. Severe	Severe		
55-64	1000	366	381		
65-74	592	155	266		
75 & over	442	106	247		
Total	2034	626	894		
Grand total	3554				
Population 2005 expected to receive care at each level when applying national rates for caregiving					
	Informal	Combined	Formal	Institutional	
Moderate	1341	551	144	177	
Moderately severe	366	209	52	140	
Severe	393	464	37	927	
Totals	2100	1224	233	1244	
Estimates for 2010 lfd pop					
	Moderate	M. Severe	Severe		
55-64	1219	446	464		
65-74	652	170	293		
75 & over	467	112	261		
Total	2338	728	1018		
Grand total	4084				

Aberdeen Area continued

Population 2010 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	1541	634	166	203
Moderately severe	425	242	60	163
Severe	448	528	42	1056
Totals	2414	1404	268	1422

Estimates for 2015 lfd pop Moderate M. Severe Severe

55-64	1418	518	540
65-74	781	204	351
75 & over	501	120	280
Total	2699	842	1171

Grand total 4712

Population 2015 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	1779	732	192	235
Moderately severe	492	280	70	189
Severe	515	608	48	1214
Totals	2786	1619	310	1637

Estimates for 2020 lfd pop Moderate M. Severe Severe

55-64	1595	583	607
65-74	951	248	427
75 & over	545	131	305
Total	3091	962	1339

Grand total 5393

Population 2020 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	2037	838	219	269
Moderately severe	562	320	80	216
Severe	589	695	55	1389
Totals	3188	1853	354	1873

Estimates of population with functional limitation and the numbers who would receive informal, formal or combined care using national norms.

Alaska Region

Proportions receiving each type of care								
Level of Functional Limitation	Informal	Combined	Formal					
Moderate	0.659	0.271	0.071					
Moderately severe	0.584	0.333	0.083					
Severe	0.44	0.519	0.041					
Alaska Area rates								
Rates for functional limitations								
Age group	Moderate	M. Severe	Severe					
55-64	0.175	0.088	0.079					
65-74	0.265	0.05	0.069					
75 & over	0.375	0.057	0.091					
Population values for Alaska Area								
Population								
Age Group	2000	2005	2010	2015	2020			
55-64	11700	14436	18764	23174	25718			
65-74	7206	8120	9344	11532	15016			
75 & over	3926	4550	5446	6112	7118			
Estimates for 2000 lfd pop								
	Moderate	M. Severe	Severe					
55-64	2048	1030	924					
65-74	1910	360	497					
75 & over	1472	224	357					
Total	5429	1614	1779					
Grand total	8822							
Population 2000 expected to receive care at each level when applying national rates for caregiving								
Informal Combined Formal Institutional								
Moderate	3578	1471	385	472				
Moderately severe	942	537	134	361				
Severe	783	923	73	1845				
Totals	5303	2932	592	2678				
Estimates for 2005 lfd pop								
	Moderate	M. Severe	Severe					
55-64	2526	1270	1140					
65-74	2152	406	560					
75 & over	1706	259	414					
Total	6384	1936	2115					
Grand total	10435							
Population 2005 expected to receive care at each level when applying national rates for caregiving								
Informal Combined Formal Institutional								
Moderate	4207	1730	453	555				
Moderately severe	1130	645	161	434				
Severe	931	1098	87	2193				
Totals	6268	3472	701	3182				
Estimates for 2010 lfd pop								
	Moderate	M. Severe	Severe					
55-64	3284	1651	1482					
65-74	2476	467	645					
75 & over	2042	310	496					
Total	7802	2429	2623					
Grand total	12854							

Alaska Region continued

Population 2010 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	5142	2114	554	679
Moderately severe	1418	809	202	544
Severe	1154	1361	108	2720
Totals	7714	4284	863	3943

Estimates for 2015	ltd pop	Moderate	M. Severe	Severe
55-64		4055	2039	1831
65-74		3056	577	796
75 & over		2292	348	556
Total		9403	2964	3183

Grand total 15550

Population 2015 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	6197	2548	668	818
Moderately severe	1731	987	246	664
Severe	1400	1652	130	3300
Totals	9328	5187	1044	4783

Estimates for 2020	ltd pop	Moderate	M. Severe	Severe
55-64		4501	2263	2032
65-74		3979	751	1036
75 & over		2669	406	648
Total		11149	3420	3716

Grand total 18284

Population 2020 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	7347	3021	792	970
Moderately severe	1997	1139	284	766
Severe	1635	1928	152	3853
Totals	10979	6089	1228	5589

Estimates of population with functional limitation and the numbers who would receive informal, formal or combined care using national norms.

Albuquerque Area

Level of Functional Limitation	Proportions receiving each type of care				
	Informal	Combined	Formal		
Moderate	0.659	0.271	0.071		
Moderately severe	0.584	0.333	0.083		
Severe	0.44	0.519	0.041		
Albuquerque Area rates					
Rates for functional limitations					
Age group	Moderate	M. Severe	Severe		
55-64	0.268	0	0.098		
65-74	0.1	0.022	0.2		
75 & over	0.191	0.148	0.357		
Population values for Albuquerque Area					
Population					
	2000	2005	2010	2015	2020
55-64	4634	5940	7497	9005	10246
65-74	2847	3334	3904	5017	6323
75 & over	2046	2350	2734	3195	3754
Estimates for 2000 ltd pop					
	Moderate	M. Severe	Severe		
55-64	1242	0	454		
65-74	285	63	569		
75 & over	391	303	730		
Total	1917	365	1754		
Grand total	4037				
Population 2000 expected to receive care at each level when applying national rates for caregiving					
	Informal	Combined	Formal	Institutional	
Moderate	1264	520	136	167	
Moderately severe	213	122	30	82	
Severe	772	910	72	379	
Totals	2249	1552	238	628	
Estimates for 2005 ltd pop					
	Moderate	M. Severe	Severe		
55-64	1592	0	582		
65-74	333	73	667		
75 & over	449	348	839		
Total	2374	421	2088		
Grand total	4883				
Population 2005 expected to receive care at each level when applying national rates for caregiving					
	Informal	Combined	Formal	Institutional	
Moderate	1565	643	169	207	
Moderately severe	246	140	35	94	
Severe	919	1084	86	437	
Totals	2729	1867	289	738	
Estimates for 2010 ltd pop					
	Moderate	M. Severe	Severe		
55-64	2009	0	735		
65-74	390	86	781		
75 & over	522	405	976		
Total	2922	491	2492		
Grand total	5904				

Albuquerque Area continued

Population 2010 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	1925	792	207	254
Moderately severe	286	163	41	110
Severe	1096	1293	102	509
Totals	3308	2248	350	873

Estimates for 2015 lfd pop Moderate M. Severe Severe

55-64	2413	0	882
65-74	502	110	1003
75 & over	610	473	1141
Total	3525	583	3027

Grand total 7135

Population 2015 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	2323	955	250	307
Moderately severe	341	194	48	131
Severe	1332	1571	124	605
Totals	3995	2720	423	1042

Estimates for 2020 lfd pop Moderate M. Severe Severe

55-64	2746	0	1004
65-74	632	139	1265
75 & over	717	556	1340
Total	4095	695	3609

Grand total 8399

Population 2020 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	2699	1110	291	356
Moderately severe	406	231	58	156
Severe	1588	1873	148	720
Totals	4692	3214	496	1232

Estimates of population with functional limitation and the numbers who would receive informal, formal or combined care using national norms.

Bemidji Region

Proportions receiving each type of care					
Level of Functional Limitation	Informal	Combined	Formal		
Moderate	0.659	0.271	0.071		
Moderately severe	0.584	0.333	0.083		
Severe	0.44	0.519	0.041		
Bemidji Area Rates					
Rates for functional limitations					
Age group	Moderate	M. Severe	Severe		
55-64	0.147	0.054	0.1		
65-74	0.235	0.034	0.103		
75 & over	0.226	0.105	0.175		
Population values for Bemidji Area					
Population					
	2000	2005	2010	2015	2020
55-64	3956	4896	6214	7303	7892
65-74	2411	2642	2954	3673	4650
75 & over	1345	1427	1531	1664	1846
Estimates for 2000 lfd pop					
	Moderate	M. Severe	Severe		
55-64	582	214	396		
65-74	567	82	248		
75 & over	304	141	235		
Total	1452	437	879		
Grand total	2768				
Population 2000 expected to receive care at each level when applying national rates for caregiving					
	Informal	Combined	Formal	Institutional	
Moderate	957	394	103	126	
Moderately severe	255	145	36	98	
Severe	387	456	36	912	
Totals	1599	995	175	1136	
Estimates for 2005 lfd pop					
	Moderate	M. Severe	Severe		
55-64	720	264	490		
65-74	621	90	272		
75 & over	323	150	250		
Total	1663	504	1011		
Grand total	3179				
Population 2005 expected to receive care at each level when applying national rates for caregiving					
	Informal	Combined	Formal	Institutional	
Moderate	1096	451	118	145	
Moderately severe	294	168	42	113	
Severe	445	525	41	1049	
Totals	1835	1143	201	1306	
Estimates for 2010 lfd pop					
	Moderate	M. Severe	Severe		
55-64	913	336	621		
65-74	694	100	304		
75 & over	346	161	268		
Total	1954	597	1194		
Grand total	3744				

Bemidji Area continued

Population 2010 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	1287	529	139	170
Moderately severe	349	199	50	134
Severe	525	619	49	1238
Totals	2161	1348	237	1541

Estimates for 2015 lfd pop Moderate M. Severe Severe

55-64	1074	394	730
65-74	863	125	378
75 & over	376	175	291
Total	2313	694	1400

Grand total 4407

Population 2015 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	1524	627	164	201
Moderately severe	405	231	58	155
Severe	616	727	57	1452
Totals	2545	1584	279	1808

Estimates for 2020 lfd pop Moderate M. Severe Severe

55-64	1160	426	789
65-74	1093	158	479
75 & over	417	194	323
Total	2670	778	1591

Grand total 5039

Population 2020 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	1760	724	190	232
Moderately severe	454	259	65	174
Severe	700	826	65	1650
Totals	2914	1809	319	2057

Estimates of population with functional limitation and the numbers who would receive informal, formal or combined care using national norms.

Billings Area

Level of Functional Limitation	Proportions receiving each type of care			
	Informal	Combined	Formal	
Moderate	0.659	0.271	0.071	
Moderately severe	0.584	0.333	0.083	
Severe	0.44	0.519	0.041	
Billings area rates.				
Rates for functional limitations				
Age group	Moderate	M. Severe	Severe	
55-64	0.206	0.065	0.103	
65-74	0.158	0.07	0.091	
75 & over	0.252	0.102	0.231	
Population values for Billings Area				
Population				
	2000	2005	2010	2015
55-64	3106	3828	4764	5698
65-74	1779	2076	2382	2944
75 & over	923	1037	1204	1406
				2020
				6166
				3658
				1620
Estimates for 2000				
ltd pop	Moderate	M. Severe	Severe	
55-64	640	202	320	
65-74	281	125	162	
75 & over	233	94	213	
Total	1154	421	695	
Grand total	2269			
Population 2000 expected to receive care at each level when applying national rates for caregiving				
	Informal	Combined	Formal	Institutional
Moderate	760	313	82	100
Moderately severe	246	140	35	94
Severe	306	361	28	721
Totals	1312	813	145	915
Estimates for 2005				
ltd pop	Moderate	M. Severe	Severe	
55-64	788	249	394	
65-74	328	145	189	
75 & over	261	106	240	
Total	1378	500	823	
Grand total	2700			
Population 2005 expected to receive care at each level when applying national rates for caregiving				
	Informal	Combined	Formal	Institutional
Moderate	908	373	98	120
Moderately severe	292	166	41	112
Severe	362	427	34	853
Totals	1562	967	173	1085
Estimates for 2010				
ltd pop	Moderate	M. Severe	Severe	
55-64	981	310	491	
65-74	376	167	217	
75 & over	303	123	278	
Total	1661	599	986	
Grand total	3246			

Billings Area continued

Population 2010 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	1095	450	118	145
Moderately severe	350	200	50	134
Severe	434	512	40	1022
Totals	1878	1161	208	1301

Estimates for 2015 lfd pop Moderate M. Severe Severe

55-64	1174	370	587
65-74	465	206	268
75 & over	354	143	325
Total	1993	720	1180

Grand total 3893

Population 2015 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	1314	540	142	173
Moderately severe	420	240	60	161
Severe	519	612	48	1223
Totals	2253	1392	250	1558

Estimates for 2020 lfd pop Moderate M. Severe Severe

55-64	1270	401	635
65-74	578	256	333
75 & over	408	165	374
Total	2256	822	1342

Grand total 4421

Population 2020 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	1487	612	160	196
Moderately severe	480	274	68	184
Severe	591	697	55	1392
Totals	2558	1582	283	1772

Estimates of population with functional limitation and the numbers who would receive informal, formal or combined care using national norms.

California Area

Level of Functional Limitation	Proportions receiving each type of care				
	Informal	Combined	Formal		
Moderate	0.659	0.271	0.071		
Moderately severe	0.584	0.333	0.083		
Severe	0.44	0.519	0.041		
California Area Rates					
Rates for functional limitations					
Age group	Moderate	M. Severe	Severe		
55-64	0.181	0.051	0.116		
65-74	0.183	0.054	0.103		
75 & over	0.215	0.081	0.141		
Population values for California Area					
Population					
	2000	2005	2010	2015	2020
55-64	8507	11024	13439	15333	16286
65-74	5217	6006	7525	9758	11878
75 & over	3514	4333	4963	5686	6914
Estimates for 2000 lfd pop					
	Moderate	M. Severe	Severe		
55-64	1540	434	987		
65-74	955	282	537		
75 & over	756	285	495		
Total	3250	1000	2020		
Grand total	6270				
Population 2000 expected to receive care at each level when applying national rates for caregiving					
	Informal	Combined	Formal	Institutional	
Moderate	2142	881	231	283	
Moderately severe	584	333	83	224	
Severe	889	1048	83	2094	
Totals	3615	2262	397	2601	
Estimates for 2005 lfd pop					
	Moderate	M. Severe	Severe		
55-64	1995	562	1279		
65-74	1099	324	619		
75 & over	932	351	611		
Total	4026	1238	2508		
Grand total	7772				
Population 2005 expected to receive care at each level when applying national rates for caregiving					
	Informal	Combined	Formal	Institutional	
Moderate	2653	1091	286	350	
Moderately severe	723	412	103	277	
Severe	1104	1302	103	2601	
Totals	4480	2805	491	3229	
Estimates for 2010 lfd pop					
	Moderate	M. Severe	Severe		
55-64	2432	685	1559		
65-74	1377	406	775		
75 & over	1067	402	700		
Total	4877	1494	3034		
Grand total	9404				

California Area continued

Population 2010 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	3214	1322	346	424
Moderately severe	872	497	124	335
Severe	1335	1575	124	3146
Totals	5421	3394	595	3905

Estimates for 2015	ltd pop	Moderate	M. Severe	Severe
55-64		2775	782	1779
65-74		1786	527	1005
75 & over		1222	461	802
Total		5783	1769	3585

Grand total 11138

Population 2015 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	3811	1567	411	503
Moderately severe	1033	589	147	396
Severe	1578	1861	147	3718
Totals	6422	4017	704	4618

Estimates for 2020	ltd pop	Moderate	M. Severe	Severe
55-64		2948	831	1889
65-74		2174	641	1223
75 & over		1487	560	975
Total		6608	2032	4087

Grand total 12727

Population 2020 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	4355	1791	469	575
Moderately severe	1187	677	169	455
Severe	1798	2121	168	4239
Totals	7340	4589	805	5269

Estimates of population with functional limitation and the numbers who would receive informal, formal or combined care using national norms.

Nashville Area

Proportions receiving each type of care								
Level of Functional Limitation	Informal	Combined	Formal					
Moderate	0.659	0.271	0.071					
Moderately severe	0.584	0.333	0.083					
Severe	0.44	0.519	0.041					
Nashville Area Rates								
Rates for functional limitations								
Age group	Moderate	M. Severe	Severe					
55-64	0.158	0.053	0.205					
65-74	0.226	0.052	0.155					
75 & over	0.355	0.092	0.211					
Population values for Nashville Area								
Population								
	2000	2005	2010	2015	2020			
55-64	4243	5243	6278	7166	7626			
65-74	2527	2980	3592	4449	5315			
75 & over	1630	1871	2110	2469	2914			
Estimates for 2000								
ltd pop	Moderate	M. Severe	Severe					
55-64	670	225	870					
65-74	571	131	392					
75 & over	579	150	344					
Total	1820	506	1605					
Grand total	3932							
Population 2000 expected to receive care at each level when applying national rates for caregiving								
Informal								
	Informal	Combined	Formal	Institutional				
Moderate	1199	493	129	158				
Moderately severe	296	169	42	113				
Severe	706	833	66	1665				
Totals	2202	1495	237	1937				
Estimates for 2005								
ltd pop	Moderate	M. Severe	Severe					
55-64	828	278	1075					
65-74	673	155	462					
75 & over	664	172	395					
Total	2166	605	1931					
Grand total	4703							
Population 2005 expected to receive care at each level when applying national rates for caregiving								
Informal								
	Informal	Combined	Formal	Institutional				
Moderate	1427	587	154	188				
Moderately severe	353	201	50	136				
Severe	850	1002	79	2003				
Totals	2631	1791	283	2327				
Estimates for 2010								
ltd pop	Moderate	M. Severe	Severe					
55-64	992	333	1287					
65-74	812	187	557					
75 & over	749	194	445					
Total	2553	714	2289					
Grand total	5555							

Nashville Area continued

Population 2010 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	1682	692	181	222
Moderately severe	417	238	59	160
Severe	1007	1188	94	2374
Totals	3106	2117	334	2756

Estimates for 2015 lfd pop Moderate M. Severe Severe

55-64	1132	380	1469
65-74	1005	231	690
75 & over	876	227	521
Total	3014	838	2680

Grand total 6532

Population 2015 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	1986	817	214	262
Moderately severe	490	279	70	188
Severe	1179	1391	110	2779
Totals	3655	2487	393	3229

Estimates for 2020 lfd pop Moderate M. Severe Severe

55-64	1205	404	1563
65-74	1201	276	824
75 & over	1034	268	615
Total	3441	949	3002

Grand total 7391

Population 2020 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	2267	932	244	299
Moderately severe	554	316	79	212
Severe	1321	1558	123	3113
Totals	4142	2806	446	3625

Estimates of population with functional limitation and the numbers who would receive informal, formal or combined care using national norms.

Navajo Area

Proportions receiving each type of care								
Level of Functional Limitation	Informal	Combined	Formal					
Moderate	0.659	0.271	0.071					
Moderately severe	0.584	0.333	0.083					
Severe	0.44	0.519	0.041					
Navaho Area Rates								
Rates for functional limitations								
Age group	Moderate	M. Severe	Severe					
55-64	0.303	0.053	0.079					
65-74	0.324	0.071	0.159					
75 & over	0.335	0.115	0.225					
Population values for Navaho Area								
Population								
	2000	2005	2010	2015	2020			
55-64	11128	13309	16581	20206	22773			
65-74	6707	7355	8222	9856	12279			
75 & over	3563	3829	4219	4629	5163			
Estimates for 2000 lfd pop								
	Moderate	M. Severe	Severe					
55-64	3372	590	879					
65-74	2173	476	1066					
75 & over	1194	410	802					
Total	6739	1476	2747					
Grand total	10962							
Population 2000 expected to receive care at each level when applying national rates for caregiving								
Informal								
	Combined		Formal	Institutional				
Moderate	4441	1826	478	586				
Moderately severe	862	491	122	331				
Severe	1209	1426	113	2849				
Totals	6511	3743	714	3766				
Estimates for 2005 lfd pop								
	Moderate	M. Severe	Severe					
55-64	4033	705	1051					
65-74	2383	522	1169					
75 & over	1283	440	862					
Total	7698	1668	3082					
Grand total	12449							
Population 2005 expected to receive care at each level when applying national rates for caregiving								
Informal								
	Combined		Formal	Institutional				
Moderate	5073	2086	547	670				
Moderately severe	974	555	138	374				
Severe	1356	1600	126	3196				
Totals	7404	4241	811	4240				
Estimates for 2010 lfd pop								
	Moderate	M. Severe	Severe					
55-64	5024	879	1310					
65-74	2664	584	1307					
75 & over	1413	485	949					
Total	9101	1948	3566					
Grand total	14615							

Navajo Area continued

Population 2010 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	5998	2466	646	792
Moderately severe	1137	649	162	436
Severe	1569	1851	146	3698
Totals	8704	4966	954	4926

Estimates for 2015 lfd pop Moderate M. Severe Severe

55-64	6123	1071	1596
65-74	3193	700	1567
75 & over	1551	532	1042
Total	10867	2303	4205

Grand total 17375

Population 2015 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	7161	2945	772	945
Moderately severe	1345	767	191	516
Severe	1850	2182	172	4361
Totals	10356	5894	1135	5822

Estimates for 2020 lfd pop Moderate M. Severe Severe

55-64	6900	1207	1799
65-74	3978	872	1952
75 & over	1730	594	1162
Total	12608	2673	4913

Grand total 20194

Population 2020 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	8309	3417	895	1097
Moderately severe	1561	890	222	599
Severe	2162	2550	201	5095
Totals	12031	6857	1318	6790

Estimates of population with functional limitation and the numbers who would receive informal, formal or combined care using national norms.

Oklahoma Area

Level of Functional Limitation	Proportions receiving each type of care				
	Informal	Combined	Formal		
Moderate	0.659	0.271	0.071		
Moderately severe	0.584	0.333	0.083		
Severe	0.44	0.519	0.041		
Oklahoma Area Rates					
Rates for functional limitations					
Age group	Moderate	M. Severe	Severe		
55-64	0.192	0.077	0.135		
65-74	0.199	0.097	0.145		
75 & over	0.285	0.091	0.186		
Population values for Oklahoma Area					
Population	2000	2005	2010	2015	2020
55-64	20427	24653	29149	32748	34837
65-74	14310	15371	17339	20955	24736
75 & over	11730	12750	13524	14272	15803
Estimates for 2000 lfd pop	Moderate	M. Severe	Severe		
55-64	3922	1573	2758		
65-74	2848	1388	2075		
75 & over	3343	1067	2182		
Total	10113	4028	7014		
Grand total	21155				
Population 2000 expected to receive care at each level when applying national rates for caregiving					
	Informal	Combined	Formal	Institutional	
Moderate	6664	2741	718	880	
Moderately severe	2353	1341	334	902	
Severe	3086	3640	288	7274	
Totals	12103	7722	1340	9056	
Estimates for 2005 lfd pop	Moderate	M. Severe	Severe		
55-64	4733	1898	3328		
65-74	3059	1491	2229		
75 & over	3634	1160	2372		
Total	11426	4550	7928		
Grand total	23904				
Population 2005 expected to receive care at each level when applying national rates for caregiving					
	Informal	Combined	Formal	Institutional	
Moderate	7530	3096	811	994	
Moderately severe	2657	1515	378	1019	
Severe	3489	4115	325	8222	
Totals	13675	8726	1514	10235	
Estimates for 2010 lfd pop	Moderate	M. Severe	Severe		
55-64	5597	2244	3935		
65-74	3450	1682	2514		
75 & over	3854	1231	2515		
Total	12901	5157	8965		
Grand total	27023				

Oklahoma Area continued

Population 2010 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	8502	3496	916	1122
Moderately severe	3012	1717	428	1155
Severe	3944	4653	368	9296
Totals	15458	9866	1712	11574

Estimates for 2015 ltd pop Moderate M. Severe Severe

55-64	6288	2522	4421
65-74	4170	2033	3038
75 & over	4068	1299	2655
Total	14525	5853	10114

Grand total 30492

Population 2015 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	9572	3936	1031	1264
Moderately severe	3418	1949	486	1311
Severe	4450	5249	415	10488
Totals	17440	11135	1932	13063

Estimates for 2020 ltd pop Moderate M. Severe Severe

55-64	6689	2682	4703
65-74	4922	2399	3587
75 & over	4504	1438	2939
Total	16115	6520	11229

Grand total 33864

Population 2020 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	10620	4367	1144	1402
Moderately severe	3808	2171	541	1460
Severe	4941	5828	460	11645
Totals	19368	12366	2146	14507

Estimates of population with functional limitation and the numbers who would receive informal, formal or combined care using national norms.

Phoenix Area

Proportions receiving each type of care					
Level of Functional Limitation	Informal	Combined	Formal		
Moderate	0.659	0.271	0.071		
Moderately severe	0.584	0.333	0.083		
Severe	0.44	0.519	0.041		
Phoenix Area Rates					
Rates for functional limitations					
Age group	Moderate	M. Severe	Severe		
55-64	0.2	0.075	0.107		
65-74	0.188	0.075	0.122		
75 & over	0.269	0.105	0.234		
Population values for Phoenix Area					
Population	2000	2005	2010	2015	2020
55-64	7790	9953	12453	15388	18119
65-74	4630	5320	6327	8092	10114
75 & over	2756	3253	3833	4392	5202
Estimates for 2000 lfd pop					
	Moderate	M. Severe	Severe		
55-64	1558	584	834		
65-74	870	347	565		
75 & over	741	289	645		
Total	3170	1221	2043		
Grand total	6434				
Population 2000 expected to receive care at each level when applying national rates for caregiving					
	Informal	Combined	Formal	Institutional	
Moderate	2089	859	225	276	
Moderately severe	713	407	101	273	
Severe	899	1060	84	2119	
Totals	3701	2326	410	2668	
Estimates for 2005 lfd pop					
	Moderate	M. Severe	Severe		
55-64	1991	746	1065		
65-74	1000	399	649		
75 & over	875	342	761		
Total	3866	1487	2475		
Grand total	7828				
Population 2005 expected to receive care at each level when applying national rates for caregiving					
	Informal	Combined	Formal	Institutional	
Moderate	2548	1048	274	336	
Moderately severe	868	495	123	333	
Severe	1089	1285	101	2567	
Totals	4505	2827	499	3236	
Estimates for 2010 lfd pop					
	Moderate	M. Severe	Severe		
55-64	2491	934	1332		
65-74	1189	475	772		
75 & over	1031	402	897		
Total	4711	1811	3001		
Grand total	9523				

Phoenix Area continued

Population 2010 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	3105	1277	334	410
Moderately severe	1058	603	150	406
Severe	1321	1558	123	3112
Totals	5483	3437	608	3928

Estimates for 2015 lfd pop Moderate M. Severe Severe

55-64	3078	1154	1647
65-74	1521	607	987
75 & over	1181	461	1028
Total	5780	2222	3661

Grand total 11664

Population 2015 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	3809	1566	410	503
Moderately severe	1298	740	184	498
Severe	1611	1900	150	3797
Totals	6718	4207	745	4798

Estimates for 2020 lfd pop Moderate M. Severe Severe

55-64	3624	1359	1939
65-74	1901	759	1234
75 & over	1399	546	1217
Total	6925	2664	4390

Grand total 13978

Population 2020 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	4563	1877	492	602
Moderately severe	1556	887	221	597
Severe	1932	2278	180	4552
Totals	8050	5042	893	5751

Estimates of population with functional limitation and the numbers who would receive informal, formal or combined care using national norms.

Portland Area

Proportions receiving each type of care					
Level of Functional Limitation	Informal	Combined	Formal		
Moderate	0.659	0.271	0.071		
Moderately severe	0.584	0.333	0.083		
Severe	0.44	0.519	0.041		
Portland Area Rates					
Rates for functional limitations					
Age group	Moderate	M. Severe	Severe		
55-64	0.161	0.049	0.096		
65-74	0.212	0.07	0.126		
75 & over	0.308	0.085	0.175		
Population values for Portland Area					
Population	2000	2005	2010	2015	2020
55-64	10152	12996	16369	18846	19864
65-74	5685	6861	8493	10879	13692
75 & over	3135	3812	4564	5483	6749
Estimates for 2000 lfd pop					
Moderate	M. Severe	Severe			
55-64	1634	497	975		
65-74	1205	398	716		
75 & over	966	266	549		
Total	3805	1162	2240		
Grand total	7207				
Population 2000 expected to receive care at each level when applying national rates for caregiving					
	Informal	Combined	Formal	Institutional	
Moderate	2508	1031	270	331	
Moderately severe	679	387	96	260	
Severe	985	1162	92	2322	
Totals	4172	2580	458	2914	
Estimates for 2005 lfd pop					
Moderate	M. Severe	Severe			
55-64	2092	637	1248		
65-74	1455	480	864		
75 & over	1174	324	667		
Total	4721	1441	2779		
Grand total	8941				
Population 2005 expected to receive care at each level when applying national rates for caregiving					
	Informal	Combined	Formal	Institutional	
Moderate	3111	1279	335	411	
Moderately severe	842	480	120	323	
Severe	1223	1442	114	2882	
Totals	5176	3202	569	3616	
Estimates for 2010 lfd pop					
Moderate	M. Severe	Severe			
55-64	2635	802	1571		
65-74	1801	595	1070		
75 & over	1406	388	799		
Total	5842	1785	3440		
Grand total	11066				

Portland Area continued

Population 2010 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	3850	1583	415	508
Moderately severe	1042	594	148	400
Severe	1514	1785	141	3568
Totals	6406	3963	704	4475

Estimates for 2015 lfd pop Moderate M. Severe Severe

55-64	3034	923	1809
65-74	2306	762	1371
75 & over	1689	466	960
Total	7029	2151	4139

Grand total 13320

Population 2015 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	4632	1905	499	612
Moderately severe	1256	716	179	482
Severe	1821	2148	170	4293
Totals	7710	4770	847	5386

Estimates for 2020 lfd pop Moderate M. Severe Severe

55-64	3198	973	1907
65-74	2903	958	1725
75 & over	2079	574	1181
Total	8180	2505	4813

Grand total 15498

Population 2020 expected to receive care at each level when applying national rates for caregiving

	Informal	Combined	Formal	Institutional
Moderate	5390	2217	581	712
Moderately severe	1463	834	208	561
Severe	2118	2498	197	4991
Totals	8971	5549	986	6264