

## DATA BRIEF • March 2016

# Primary Care Service Areas in South Carolina

### Background

This project was developed in collaboration with the South Carolina Department of Health and Environmental Control (DHEC) Primary Care Office in order to identify primary care market areas and resources within South Carolina. Primary Care Service Areas (PCSAs) are designed to identify small geographic areas that are relatively self-contained markets for primary care. The 95 PCSAs identified in our analysis were developed using de-identified 2013 billing data from the South Carolina State Employee Health Plan to identify patient travel patterns for ambulatory non-consultative primary care services. The State Employee Health Plan is the largest private insurance plan in the state, covering approximately 550,000 lives.

#### **Methods and Data Sources**

We applied the PCSA methodology developed by Dartmouth University researchers<sup>i</sup> which links the geographic location of primary care providers with the residential location of people obtaining primary care services from those provider locations. State Employee Health Plan beneficiaries identified as receiving primary care services from a qualified provider were grouped together by their residential ZIP Code. Within each ZIP Code area the data was subdivided by the ZIP Code areas of the providers seen during those visits and then the number of visits were summed and standardized. The service areas were created by identifying the provider area visited most often by people living in a specific residential area. This process creates clusters of geographic areas based on provider location ZIP Code areas with the associated patient residential ZIP Code areas.

#### Results

While the majority of the service areas created were based on where the population received care, in a few cases the boundary of a PCSA was influenced by the culture or history of an area which was obtained through in-depth consultation with the South Carolina DHEC Primary Care Office. In these cases one or more PCSAs were combined, or a larger service area was divided to create two or more separate PCSAs. Because the PCSAs we have identified in this analysis are based on the patient travel patterns <u>and</u> the practice location of primary care physicians in 2013, PCSA geographic areas may be different in the future as travel patterns and provider locations change.



Click here to see the full map and access the resource information.

Each Zip Code in South Carolina is encompassed in a Primary Care Service Area. Click on the link above to see the PCSA map. The map also includes a summary report of population characteristics, health status indicators and primary care provider resources available in each of the PCSAs. To see the characteristics of a specific PCSA click on that area of the map. A list of Zip Codes and the name of the associated PCSA can be found at the end of this report. By linking information about community characteristics to each PCSA we hope this information will be useful for needs and policy assessment projects related to primary care resources in South Carolina.

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#### Data sources:

Information on population characteristics, health status indicators and community resource measures used in the PCSA needs assessment came from the American Community Survey (the 2013 ZCTA Summary data file) and the U.S. Census Office (2010 population figures).

Information about primary care providers practicing in each PCSA was drawn from professional licensure files available in South Carolina which contain detailed information about clinical specialty, practice setting type and location, and hours worked per week.

Data used to calculate hospital discharge rates and ER visit rates for South Carolina citizens was provided by the South Carolina Revenue and Fiscal Affairs Office, Health and Demographics Section. Information about low birth weight births was provided by the Biostatistics Division of the South Carolina Department of Health and Environmental Control.

For more detailed information on the South Carolina Primary Care Service Area needs Assessment please contact the Office for Healthcare Workforce Analysis and Planning.

<sup>1</sup> Goodman et al. <u>Primary Care Service Areas: a New Tool for the Evaluation of Primary Care Services</u>. *Health Services Research* 2003: 38: 287 – 309.

ZIP		ZIP		ZIP		ZIP		ZIP	
	PCSA	CODE	PCSA	CODE	PCSA	CODE	PCSA		PCSA
28277	Charlotte NC	29160	Swansea	29424	Mount Pleasant	29580	Georgetown	29714	Rock Hill
	Laurinburg NC	29161	Florence	29426	Charleston	29581	Mullins	29715	Rock Hill
29001	Manning	29162	Turbeville	29429	Mount Pleasant	29582	North Myrtle Beach	29717	Western York County
29003	Bamberg	29163	Orangeburg	29431	Moncks Corner	29583	Pamplico	29718	Jefferson
29006	Lexington	29164	Aiken	29432	Branchville	29584	Hartsville		Lancaster
29009	Camden	29166	Saluda	29434	Moncks Corner	29585	Pawleys Island	29724	Rock Hill
29010	Bishopville	29168	Sumter	29435	Walterboro	29588	Murrells Inlet / Socastee	29726	Rock Hill
29014	Chester	29169	Columbia	29436	Moncks Corner	29590	Kingstree	29727	Cheraw
	Winnsboro	29170	West Columbia	29437	Summerville	29591	Lower Florence	29728	Pageland
29016	Columbia	29172	West Columbia	29438	Edisto Island	29592	Dillon	29729	Rock Hill
29018	Orangeburg	29175	Camden	29439	James Island	29593	Society Hill	29730	Rock Hill
29020	Camden	29178	Whitmire	29440	Georgetown	29594	Laurinburg NC	29732	Rock Hill
29030	Orangeburg	29180	Winnsboro Columbia	29445	North Charleston	29596	Cheraw	29733	Rock Hill
29031 29032	Union Camden	29201 29202	Columbia	29446 29448	Walterboro Saint George	29601 29605	Greenville Greenville	29741 29742	Cheraw Western York County
29032	Columbia	29202	Columbia	29440	Ravenel / Hollywood	29605	Greenville	29742	Western York County
29036	Chapin	29204	Columbia	29450	Mount Pleasant	29609	Greenville	29745	Western York County
29037	Greenwood	29205	Columbia	29451	Mount Pleasant	29611	Greenville	29801	Aiken
29038	Orangeburg	29206	Columbia	29452	Walterboro	29613	Greenville		Aiken
29039	Orangeburg	29207	Columbia	29453	Moncks Corner	29614	Greenville	29805	Aiken
29040	Sumter	29208	Columbia	29455	James Island	29615	Greenville	29809	Aiken
29042	Bamberg	29209	Columbia	29456	North Charleston	29617		29810	Fairfax / Allendale
29044	Columbia	29210	Irmo / Dutchfork	29458	Mount Pleasant	29620	Abbeville	29812	Barnwell
29045	Blythewood	29212	Irmo / Dutchfork	29461	Moncks Corner	29621	Anderson	29816	North Augusta
29046	Bishopville	29223	Blythewood	29464	Mount Pleasant	29624	Anderson	29817	Barnwell
29047	Elloree	29225	Columbia	29466	Mount Pleasant	29625	Anderson	29819	Greenwood
29048	Orangeburg	29229	Blythewood	29468	Moncks Corner	29626	Anderson	29821	Evans GA
29051	Sumter	29301	Spartanburg	29469	Moncks Corner	29627	Anderson	29824	Edgefield
	Columbia	29302	Spartanburg	29470	Ravenel/ Hollywood	29628	Greenwood	29826	Aiken
29053	West Columbia	29303	Spartanburg	29471	Saint George	29630	Clemson	29827	Fairfax / Allendale
29054	Lexington	29303	Spartanburg	29472	Summerville	29631	Clemson	29828	Aiken
29055	Chester	29306	Spartanburg	29474	Walterboro	29634	Clemson	29829	North Augusta
	Manning	29307	Spartanburg	29475	Walterboro	29635	Greenville	29831	Augusta GA
	Lancaster	29316	Spartanburg	29477	Saint George	29638	Due West	29832	Edgefield
29059 29061	Holly Hill Columbia	29320 29321	Spartanburg Union	29479 29481	Moncks Corner Walterboro	29639 29640	Due West	29834 29835	Aiken Mc Cormick
29061	Irmo / Dutchfork	29321	Spartanburg	29461	Mount Pleasant	29640	Easley Powdersville	29835	Fairfax / Allendale
29062	Irmo / Dutchfork	29322	Spartanburg	29482	Summerville	29643	Seneca	29838	Edgefield
29065	Peak	29324	Spartanburg	29485	Ladson	29644	Simpsonville	29840	Greenwood
29067	Camden	29325	Laurens / Clinton	29487	Mount Pleasant	29645	Laurens/ Clinton	29841	North Augusta
29069	Darlington	29329	Spartanburg	29488	Walterboro	29646	Greenwood	29842	North Augusta
29070	Lexington	29330	Spartanburg	29492	Mount Pleasant	29649	Greenwood	29843	Barnwell
29072	Lexington	29331	Spartanburg	29493	Walterboro	29650	Greenville	29844	Edgefield
29073	Lexington	29332	Greenwood	29501	Florence	29651	Greenville	29845	Mc Cormick
29074	Lugoff	29333	Spartanburg	29505	Florence	29653	Greenwood	29847	Edgefield
29075	Chapin	29334	Spartanburg	29506	Florence	29654	Anderson	29848	Greenwood
29078	Lugoff	29335	Spartanburg	29510	Georgetown	29655	Anderson	29849	Barnwell
29079	Hartsville	29338	Spartanburg	29511	Aynor	29657	Easley	29850	Aiken
29080	Sumter	29340	Gaffney	29512	Bennettsville	29658	Seneca	29851	Aiken
29081	Bamberg	29341	Gaffney	29516	Bennettsville	29659	Anderson	29853	Barnwell
29082	Walterboro	29346	Spartanburg	29518	Lower Florence	29661	Travelers Rest	29856	Aiken
29101	Hartsville	29349	Spartanburg	29519	Aynor	29662	Greenville	29860	North Augusta
	Manning	29351	Laurens / Clinton	29520	Cheraw	29664	Seneca	29899	Mc Cormick
29104	Sumter		Spartanburg		Bennettsville	29665	Seneca	29902	Beaufort
	Lexington Orangeburg	29355 29356	Newberry Landrum		Conway Conway	29666 29667	Greenwood Easley	29904 29905	Beaufort Beaufort
29107	Newberry	29350	Laurens / Clinton	29527	Lower Florence	29667	Greenville	29905	Beaufort
	Manning	29364	Union	29532	Darlington	29009	Anderson	29900	Beaufort
	Swansea	29365	Spartanburg	29536	Dillon	29671	Easley	29909	Bluffton
29113	Orangeburg	29368	Spartanburg	29540	Darlington	29672		29910	Bluffton
29114	Lower Florence	29369	Spartanburg	29541	Florence	29673	Greenville	29911	Hampton / Varnville
29115	Orangeburg	29370	Laurens / Clinton	29543	Dillon	29676	Seneca		Walterboro
29115	Orangeburg	29372	Spartanburg	29544	Aynor	29678	Seneca	29915	Bluffton
29117	Orangeburg	29373	Spartanburg	29545	Loris	29680	Simpsonville	29916	Hampton / Varnville
29118	Orangeburg	29374	Spartanburg	29546	Conway	29681	Simpsonville	29918	Hampton / Varnville
29122	Peak	29375	Spartanburg	29547	Dillon	29682	Easley	29920	Beaufort
29123	Lexington	29376	Spartanburg	29550	Hartsville	29683	Greenville	29921	Hampton / Varnville
29125	Sumter	29377	Spartanburg	29554	Georgetown	29684	Anderson	29922	Hampton / Varnville
29126	Peak	29378	Spartanburg	29555	Lower Florence	29685	Easley	29923	Hampton / Varnville
	Chapin	29379	Union	29556	Kingstree	29686	Seneca	29924	Hampton / Varnville
29128	Sumter	29384	Greenwood	29560	Lower Florence	29687	Greenville	29926	Hilton Head Island
29129 29130	Edgefield Winnsboro	29385 29388	Spartanburg	29563	Dillon Kingstree	29689	Anderson Travelers Rest	29927 29928	Hardeeville Hilton Head Island
	Orangeburg	29388 29401	Spartanburg Mount Pleasant	29564 29565	Dillon	29690 29691	Seneca	29928	Walterboro
29135	Orangeburg	29401	Mount Pleasant	29565	Little River	29691	Greenwood	29929 29932	Hampton / Varnville
29135	Lexington	29403	North Charleston	29567	Dillon	29693	Seneca	29934	Hampton / Varnville
29137	Saluda	29404	Mount Pleasant	29568	Little River	29093	Seneca	29935	Beaufort
	Orangeburg	29405	North Charleston	29569	Loris	29697	Anderson	29936	Ridgeland
	Newberry	29407	Ravenel / Hollywood	29570	Bennettsville	29702	Gaffney	29939	Hampton / Varnville
	Orangeburg	29409	Mount Pleasant	29571	Marion	29704	Rock Hill	29940	Beaufort
29146				29572	Myrtle Beach	29706	Chester	29941	Beaufort
29146 29147	Columbia	29410	North Charleston	27312					
29147		29410 29412	North Charleston James Island	29574	Mullins	29707	Charlotte NC	29943	Ridgeland
29147	Columbia		James Island Charleston				Charlotte NC Rock Hill	29944	Hampton / Varnville
29147 29148 29150 29152	Columbia Manning	29412	James Island	29574	Mullins	29707			
29147 29148 29150	Columbia Manning Sumter Sumter Sumter	29412 29414	James Island Charleston	29574 29575 29576 29577	Mullins Surfside Beach	29707 29708	Rock Hill Cheraw Western York County	29944	Hampton / Varnville