MedCrave
Step into the World of Research
International Journal of Family & Community Medicine

Research Article
Open Access
CrossMark

Public health ramifications of regional variation of DSH by congressional districts and state

Abstract

Hospitals in communities with a significant percentage of indigent patients have, since 1981, received a federal adjustment to allow them to receive some compensation for treating these patients. The PPACA severely restricted these Disproportionate Share Hospital (DSH) payments as a cost saving measure. However, the law does not account for the potentially devastating impact of the lack of revenue caused in some localities with large populations of undocumented Americans ineligible to obtain insurance under the act. We created two easily identifiable quotients based on U.S. Census Bureau estimates of foreign-born population and Medicaid DSH payments aggregated by congressional district. These quotients allowed us to predict which congressional districts are at risk for continued high demand of their services by indigent patients in the face of severe DSH reductions. Our data can be used to predict which municipalities may be hardest hit by the impending DSH reductions, spurring legislators to offset the spending shortfall and the public health ramifications of inadequate hospital funding.

Volume 2 Issue 4 - 2018

Howard C Mandel, Carl Nunziato
Century City Women's health, USA

Correspondence: Howard C Mandel, Century City Women's Health, USA, Email pairrodocs@aol.com

Received: July 27, 2017 | **Published:** August 17, 2018

Main text

The Omnibus Budget Reconciliation Act of 1981 created Medicaid DSH payments.[1] This was necessary because hospitals serving a larger proportion of low income patients are particularly dependent on the poorer than private-payor revenue stream associated with Medicaid reimbursement as well as the reality that many low income populations including the undocumented are uninsured.[2] The architects of the Patient Protection and Affordable Care Act (ACA, P.L. 111-148 as amended) expected its health insurance provisions to reduce the number of uninsured individuals in the United States to the point that there would be less need for Medicaid DSH payments.[2] The law directs the Secretary of Health and Human Services to make aggregate reductions of DSH from 2014 through 2020, however Congress extended this reduction through 2022.[2–4] Congress planned to reduce DSH payments by $17.1 billion by 2020.[5] DSH payments are not evenly distributed with the Middle Atlantic States, Southern Atlantic and Pacific Regions receiving 60% of payments, yet only 46% of Medicare discharges.[6] Five states, NY, CA, TX, NJ and PA alone get the majority of these payments.[2] Undocumented Americans are also unevenly distributed throughout the United States.[7–9] As the Emergency Treatment and Labor Act (EMTALA) requires care and treatment of this population, DSH has secured the safety net, especially in localities with large numbers of these immigrants. Additionally, as new citizens are not eligible for most forms of federal programs for 5 years, these individuals who are low income will not be capable of getting Medicaid and also will remain uninsured despite ACA. In FY2012, the federal DSH payments totaled $11.3 billion.[2–10] Given the significant variation in DSH payments and the concentrated populations of both the new citizens as well as the undocumented Americans, we hypothesized that some localities and their hospitals would be significantly impacted by the DSH reduction and that this dramatic reduction in revenue could not be cost shifted onto other payor classes. This adverse economic situation would result in public health devastation if not addressed. We also postulated that as the ACA was so highly politicized that this impending public health emergency would not be addressed unless congressional representatives recognized the significance in their home districts or states.

Method

The DSH Audit and Reporting Rule require states to submit annual independent audits describing payments to DSH hospitals. Publically available reports from Medicaid State Plan Rate Year 2008, provided by the Centers for Medicare & Medicaid Services, were used to compile a list of DSH hospitals that received one million dollars or more in DSH funding in 2008. Coordinate data from these hospitals was used in conjunction with Sunlight Foundation's Congress API database to assign a congressional district based on the 112th and 113th congressional boundaries. The aggregation of payments by congressional district and state resulted in the estimated 2008 DSH Payments values. Next, an estimate for the fraction of a congressional district's non-naturalized, foreign-born population was calculated from the ethnicity data available in the U.S. Census Bureau's 2010 American Community Survey (ACS) 3-Year estimates. Due to the lack of accurate estimates of undocumented immigrants by congressional districts, we relied on the Census Bureau's estimations for all foreign-born populations, and expect the number of undocumented is proportionate to the total number of immigrants in a region. We also analyzed the data and looked for correlation with the congressional district and state analysis of an Immigration Policy Center data set that was created in association with Rob Paral & Associates.[8] These estimates were cross-referenced with the congressional and state level estimates for DSH payments and used to calculate the Mandel-Nunziato Quotient (MNQ) -- a function of a given region's total DSH payments multiplied by the percentage of non-naturalized, foreign-born persons (NN). The Mandel-Nunziato Indigent Quotient (MNIQ) was similarly calculated first by deriving the percentage of people in a congressional district or state population receiving Medicaid or other mean's tested public coverage using data from the 2010 ACS table "Types of Health Insurance Coverage by Age". This data, once combined with the DSH and ethnicity dataset, was used to calculate the MNIQ as a function of total DSH payments multiplied by the percentage of a region's population that is either non-naturalized or receiving mean's tested public health insurance coverage (MTC). To enhance readability, all MNQ and MNIQ values were divided by a factor of one million and ranked from highest to lowest.

Mandel nunziato quotient:

DSH x % NN =MNQ

Mandel nunziato indigent quotient

DSH x (%NN + %MTC)= MNIQ

As Tennessee operates their Medicaid programs under a Section 1115 waiver they were not included in our data collection.[2]

Results

MNQs and MNIQs were calculated and the 20 highest values organized into Table 1 & Table 2. Similarly, Table 3 shows the top 20 states receiving the largest DSH payments with their corresponding MNQs and MNIQs. Table 4A– Table 4G, containing the entire list of the 293 Congressional Districts with at least one hospital that received DSH payments of more than $1 million, ranked from largest to smallest MNIQ, is available to supplement our report. Organized by Mandel-Nunziato Quotient (MNQ)-a function of a given region's total DSH payments multiplied by the percentage of non-naturalized, foreign-born persons.

Table 1 Top 20 Congressional districts at risk of significant financial stress due to DSH reductions

Congressional District (112th)	MNQ	MNIQ	2008 DSH Payments
CA#34	130.556	216.106	436,035,424
NY#11	55.148	135.136	304,229,492
TX#9	54.763	76.917	210,336,081
NY#16	44.153	134.461	191,165,186
NJ#13	44.114	67.598	167,078,413
NY#7	37.656	78.841	173,951,223
NY#15	36.972	96.049	193,419,395
CA#15	31.921	50.071	184,917,676
NY#14	31.802	52.389	211,736,810
TX#30	31.085	54.621	186,632,226
NJ#10	30.426	67.671	216,601,845
NY#5	28.126	48.091	119,478,124
AZ#4	26.559	52.843	120,365,411
CA#43	25.799	48.308	133,775,811
NY#17	25.708	60.221	174,057,134
CA#27	23.394	39.581	124,852,462
CA#36	23.141	37.893	163,291,882
CA#8	19.416	40.024	127,342,073
CA#20	17.808	36.791	73,907,877
CA#9	17.582	34.217	120,248,108

Table 2 Top 20 Congressional districts at risk of stress due to DSH reductions organized by Mandel-Nunziato Indigent Quotient (MNIQ). The MNIQ is a function of total DSH payments multiplied by the percentage of a region's population that is either non-naturalized or receiving mean's tested public health insurance coverage (MTC). To enhance readability, all MNQ and MNIQ values were divided by a factor of one million and ranked from highest to lowest

Congressional Districts (112th)	MNIQ	MNQ	2008 DSH Payments
CA#34	216.106	130.556	436,035,424
NY#11	135.136	55.148	304,229,492
NY#16	134.461	44.153	191,165,186
NY#15	96.049	36.972	193,419,395
NY#7	78.841	37.656	173,951,223
TX#9	76.917	54.763	210,336,081
NJ#10	67.671	30.426	216,601,845
NJ#13	67.598	44.114	167,078,413
NY#17	60.221	25.708	174,057,134
NY#10	58.775	16.799	140,723,119
TX#30	54.621	31.085	186,632,226
AZ#4	52.843	26.559	120,365,411
NY#14	52.389	31.802	211,736,810
CA#15	50.071	31.921	184,917,676
CA#43	48.308	25.799	133,775,811
NY#5	48.091	28.126	119,478,124
LA#2	40.272	8.268	193,327,198
CA#8	40.024	19.416	127,342,073
CA#27	39.581	23.394	124,852,462
CA#36	37.893	23.141	163,291,882

Table 3 The top 20 states receiving the largest DSH payments with their corresponding MNQs and MNIQs

State	2008 DSH Payments	MNQ	MNIQ
NY	2,619,221,027	262.8	554.9
CA	2,061,345,386	263.7	465.1
TX	1,394,048,286	68.2	291.1
NJ	1,203,622,474	129.5	249.4
LA	937,607,647	13	127.7
MO	677,878,646	10.1	74.9
OH	595,008,973	12.9	95.3
PA	578,869,424	19.3	80.9
SC	432,791,995	6	59.3
NC	420,918,230	7.5	42.8
AL	388,509,120	3.8	38.8
GA	374,470,631	9.5	54.9

Citation: Mandel HC, Nunziato C. Public health ramifications of regional variation of DSH by congressional districts and state. *Int J Fam Commun Med.* 2018;2(4):229–236. DOI: 10.15406/ijfcm.2018.02.00085

Table Continued

State	2008 DSH Payments	MNQ	MNIQ
CT	308,842,114	20	64.6
MI	255,110,779	5.3	52.6
IN	250,301,219	3.5	22.2
IL	219,130,021	7.4	33.4
NH	218,697,472	6.2	33.1
NM	216,404,518	7.9	31.4
MS	174,695,408	1.3	17.7
CO	169,732,576	4.8	24.8

Table 4 Congressional District by MNIQ

Congressional District (112)	MNIQ	MNQ	2008 DSH Payments Received
CA-34	216.106	130.556	436,035,424
NY-11	135.136	55.148	304,229,492
NY-16	134.461	44.153	191,165,186
NY-15	96.049	36.972	193,419,395
NY-7	78.841	37.656	173,951,223
TX-9	76.917	54.763	210,336,081
NJ-10	67.671	30.426	216,601,845
NJ-13	67.598	44.114	167,078,413
NY-17	60.221	25.708	174,057,134
NY-10	58.775	16.799	140,723,119
TX-30	54.621	31.085	186,632,226
AZ-4	52.843	26.559	120,365,411
NY-14	52.389	31.802	211,736,810
CA-15	50.071	31.921	184,917,676
CA-43	48.308	25.799	133,775,811
NY-5	48.091	28.126	119,478,124
LA-2	40.272	8.268	193,327,198
CA-8	40.024	19.416	127,342,073
CA-27	39.581	23.394	124,852,462
CA-36	37.893	23.141	163,291,882
PA-1	37.357	8.129	113,764,130
CA-20	36.791	17.808	73,907,877
CA-9	34.217	17.582	120,248,108
CA-45	33.559	17.009	123,286,229
NJ-1	31.414	7.319	191,834,652
NJ-8	31.36	17.148	110,020,834
AL-7	31.284	2.872	162,808,593
MI-13	29.501	4.265	90,048,395

Table Continued

Congressional District (112)	MNIQ	MNQ	2008 DSH Payments Received
NM-1	29.136	10.696	140,209,339
NY-12	28.016	12.976	53,337,737
IL-7	27.723	7.727	130,165,516
CT-3	27.716	9.275	144,095,511
CA-40	27.164	16.672	105,343,430
OH-11	26.68	3.542	131,727,319
SC-6	26.454	2.031	149,875,473
NY-4	25.309	13.652	118,667,059
GA-5	25.061	11.332	135,496,789
CA-5	24.574	8.69	81,179,071
LA-1	23.41	6.243	169,438,687

Table 4A Congressional District by MNIQ

Congressional District (112)	MN IQ	MNQ	2008 DSH Payments Received
NY-9	23.15	9.959	69121307
IN-7	23.086	7.138	94249,639
NY-28	22.714	3.025	87936315
TX-20	22.642	10.261	95779475
CO-1	22.576	10.466	94782584
CA-18	22.079	9.266	53127683
MO-5	22.071	6.383	1.74E+08
CA-53	21.463	12.642	83837141
NY-18	21.073	13.227	97036963
LA-4	21.016	2.201	1.45E+08
NY-2	20.364	10.552	106,317,,888
VA-3	20.2.52	4.703	1.31E+08
NY-S	20.01	9.174	58383068
LA-5	19.854	1.332	1.18E+08
NV-1	19.186	12.605	73643353
NI-6	17.649	11.443	83335325
NC-S	17.4.52	6.576	1.03E+08
NY-6	17.035	7.558	40004841
CT-1	17.026	5.687	80913834
NJ-9	16.416	10.786	62119027
NJ-12	16.08	9.856	104,,911,771
RI-2	15.945	5.796	77674225
NC-13	15.79	7.541	87268856
NY-25	15.443	3.177	1.02E+08
MD-7	14.988	3.462	61003931
LA-6	14.818	2.797	118,240,,957
TX-22	14.6.32	8.726	48705495

Citation: Mandel HC, Nunziato C. Public health ramifications of regional variation of DSH by congressional districts and state. *Int J Fam Commun Med.* 2018;2(4):229–236. DOI: 10.15406/ijfcm.2018.02.00085

Table Continued

Congressional District (112)	MN IQ	MNQ	2008 DM Payments Received
M N-5	14.62	12907	60591737
MO-9	14.487	2.132	1.37E+08
NJ-11	14.474	9.46	122,971403
TX-12	14.338	8.262	87661503
CA-7	14.18	7.084	50292.96
LA-7	14.179	1.813	103..795,678
TX-16	14.139	7.385	49836213
OH-15	13.774	5295	102,477..284
NM-2	13.605	4.258	56,.557,858
CA-12	13.149	8.28	61,914)699
NH-2	13.019	3.495	139;449240
TX-5	12.94	6.121	85,809)782

Table 4B Congressional District by MNIQ

Congressional District (112)	M N IQ	IYINQ	2008 DSH Payments Received
TX-14	12.936	6.257	99025308
LA-3	12.725	1.703	86731018
PA-14	12.627	1.823	63335860
TX-23	12.201	5.827	59565094
5C.4	11.572	4.151	78,846436
M5-3	11.412	1.009	80821478
SC-1	11.096	3.931.	92566427
MO-1	10.909	2.119	701623,661
TX-15	10,74.5	5.402	361464.9
NY-1	10.34	4.295	83699384
TX-21	0.099	5.054	86269122
CA.17	9.894	6.29	31397303
NC-3	9376	2.457	69657554
TX-18	9.348	5.009	27061738
M5-4	9.305	1.205	72508940
PA-2	9.236	1.691	36186068
AL-5	9.139	2.293	81767381
PA-6	9.049	3.328	70534577
NC-1	9.023	1.051	41335,272
1L-12	8769	0.604	55564152
KY-1	8.68	0.628	64842072
C1-5	8557	2.984	40028290
TX-19	8.442	2.7	57894373
GA-2	8.349	1.052	45543086
NY-22	8333	2372	43,243,788
MO-7	7952	1.363	74604137
OR-1	7.628	3.877	47352282

Table Continued

Congressional District1112)	M N IQ	IYINQ	2O DM Payments Received
NY-21	7.419	1.436	41981071
MI-15	7.384	1.611	44076741
TX .4	7.365	2.992	58268248
PA-10	7.316	0.68	60758805
AR-2	7.27	1829	54625617
fsJ 1-1-1	7123	1.902	79248232
AL-1	6.96?	1.236	52805121
VT-2	6.945	0.592	33511969
RI-1	6.875	2.189	36461389
CA-24	6.755	3.652	40712567
CT-4	6495	3.626	30553457
TX-29	6.48	4.047	15694240

Table 4C Congressional District by MNIQ

Congressional District (112)	MNIQ	M N Q	2008 DSH Payments Received
NY-19	6.444	2.494	42,028..050
CO-5	6.428	1.73	49280282
CA-37	6.334	2.968	16349374
OH-3	6.271	0.833	53,599..263
NY-27	6.168	0.788	33773339
TX-1.7	5.788	2.8	40205236
OH-12	5.784	1.924	38553809
MO-8	5.773	0.284	36101300
CA-30	5.77	3.354	36,786.232
NJ-7	5.613	3.552	40,676449
PA-18	5.612	0.957	54195512
OH-9	5.529	0.604	36981310
N.1-2	5.395	1.692	29,848.299
MO-3	5.375	1.821	47898830
M04	5.365	0.833	49681676
SC-3	5.347	1.011	40,070,,770
NC-7	5.346	1.383	32,019..021
PA-15	5.224	1.271	39018225
OK-5	5.17	2.258	32762186
AL-3	5.047	0.858	35399870
I N-9	5.005	1.215	43,485,350
AL-2	4.993	0.575	37.246,879
$C-2	4.947	1.64.8	40260960
OH-1	4.841	0.97	33.728,163
PA-3	4.803	397	32980108
M 1-5	4.697	0.194	21.931,329
5C-5	4.683	600	31172229

Citation: Mandel HC, Nunziato C. Public health ramifications of regional variation of DSH by congressional districts and state. *Int J Fam Commun Med.* 2018;2(4):229–236. DOI: 10.15406/ijfcm.2018.02.00085

Table Continued

Congressional District (112)	MNIQ	M N Q	2008 DSH Payments Received
PA-16	4.68	1.417	30898825
TX-1	4.666	1.85	29493207
NY-24	4.643	0.612	25122250
NC-4	4.549	2.575	32895523
MO-6	4.51	0.759	50668982
GA-10	4.413	1.149	34690084
KY-5	4.408	0.047	20801737
KY-2	4.339	0.668	33,422,663.
IN-6	4.245	0.42	40128570
NY-13	4.183	1.518	14355848
WV-3	4.111	0.106	24794068
OH-17	4.103	0.368	31,342,277

Table 4D Congressional District by MNIQ

Congressional District (112)	MNIQ	MNQ	2008 D51-1 Payments Received
NJ-4.	4.089.	1.62	26080371
M N-4	4.071	1.447	20833707
PA-9	4.068	0.269	32541560
OH-7	3.91	0.581	27923895
IA-3	3.749	0.9.36	23819261
GA-12	3.685	0.78	27313762
TX-22	3.634	2.372	23851010
NM-3	3.475	0.879	19637321
NY-23	3.387	296	19090013
NC-10	3.386	0.7.55	25382475
NY-20	3.377	0.4.57	26845115
GA-1	3.365	0.7.58	25222037
MS-2	3.212	0.21	15134459
GA-4	3.167	19368	13200748
NJ-5	3.082	1.594	28085589
IN-S	3.005	0.257	26944628
GA-13	2.97	1.42	16824618
NE-2	2.96	1.11	23750315
GA-9	2.927	1.31	18806680
GA-S	2.901	0.55	19489590
M1-14	2.883	0.344	10322735
ME-2	2.855	0.172	11654331
OH-13	2.831	394	24940735
TX-10	2.792	1358	15070794
KY-6	2.753	0.836	20838816
MI-6	2.688	0.404	17504211
TX-7	2.678	2.057	13420909

Table Continued

Congressional District (112)	MNIQ	MNQ	2008 D51-1 Payments Received
GA-11	2.642	1.125	21082003
UT-2	2.565	0.902	21137387
FL-20	2.495	1317	10286832
AL-4	2.49	523	15713716
OH-4	2457	0.081	19275977
NY-3	2.446	1.137	18794345
TX-11	2.428	1.03	17588334
TX-32	2.383	1.868	8271053
M0-2	2.32	0.9.50	37568441
VA-5	2.311	0.505	19821744
NY-29	2.304	0.233	16120786
NJ-3	2.235	0.664	20058796

Table 4E Congressional District by MNIQ

Congressional District (112)	MNIQ	MNQ	2008 D51-1 Payments Received
PA-17	2.229	0.35	18721618
ME-11	2.195	212	14023000
IA-2	2.185	0.493	15976087
WV-2	2.176	0.134	16609763
OH-10	2.168	0.461	13872589
HT-3	2.165	0.64	16093456
TX-13	2.092	0.88	14345792
CO-3	2.055	0.548	13057256
CA-211	2.021	839	6000646
OH-18	1.998	0.072	15043206
Uri	1.981	0.816	15535854
CT-2	1.96	0.507	13251022
MI-1	1.959	0.121	12688828
111.-16	1.944	0.55	12973153
AK-1	1.916	0.522	14268274
MD-1	1.868	0.349	16,420r800
MD-6	1.855	0.434	15842616
CO-4	1.786	0.683	12612454
1L-19	1.77	0.112	15,202451
M 1-7	1.729	0.224	11143774
MI-8	1322	397	12328190
ID-2	1.718	0.605	13030292
NY-26	1.658	0.297	12320329
TX-27	1.646	0.77	7458,970
PA-7	1.581	0.676	13490825
WV-I	1.573	85	12856337
HI-1	1.545	0.765	7341025

Citation: Mandel HC, Nunziato C. Public health ramifications of regional variation of DSH by congressional districts and state. *Int J Fam Commun Med.* 2018;2(4):229–236. DOI: 10.15406/ijfcm.2018.02.00085

Table Continued

Congressional District (112)	MNIQ	MNQ	2008 D51-1 Payments Received
IN-3	1.524	0.404	14537184
OH-16	1.52	0.149	13611668
M I-4	1.453	0.096	10584339
OH-2	1.451	0.291	12753360
M D-3	1.418	0.615	9122195
M 1-12	1.386	305	7783945
N C-9	1359	0.633	11452096
NC-2	1.314	0.448	7491359
OH-8	1.299	0.236	11056754
GA-3	1.249	0.313	10974328
TX-31	1.221	0.569	9589906
M D-4	1.203	0.702	5616807

Table 4F Congressional District by MNIQ

Congressional District (112)	MNIQ	MNQ	2008 DSH Payments Received
IL-5	1.169	0.763	5225049
IN-4	1.15	0.387	11858766
MI-3	1.141	0.25	7539227
IN-2	1.121	0.276	9051907
TX-3	1.042	0.758	5551301
CA-a	0.989	321	4548565
KS-4	0.985	304	7716222
M I-2	0.981	0.161	6674434
MS-1	0.97	0.084	6230531
GA-7	0.957	0.613	5826906
NV-2	0.845	0.404	5956577
MN-1	0.838	0.178	61078,997
NC-5	0.83	225	6076898
OH-6	0.787	0.035	5692315
K5-3	0.755	0.429	6691886
KS-Z	0.751	0.152	7354155
KY-4	0.743	0.089	6564694
IA-5	0.73	0.166	5400932
CA-52	0.729	375	2,1.98,173
AZ-7	0.714	0.264	2050404
IN-5	0.69	0.189	7837546
OH-14	0.643	0.132	7186796
01C-1	0.617	0.243	5114840
NC-11	399	0.139	4529948
N E-3	0393	(1137	5,302,536
MT-1	366	0.057	6811855
VA-4	0.533	0.109	4937799

Table Continued

Congressional District (112)	MNIQ	MNQ	2008 DSH Payments Received
DE-1	0.511	0.122	2814038
011-5	0.502	0.046	4,955421
ID-1	0.461	0.116	4173840
IA-1	0.452	0.055	3793596
PA-13	0.402	0.129	2427145
M N-8	0.392	0.015	2560922
MI-9	0.384	0.171	2484,631
NE-1	0.366	0.129	3629561
AZ-5	0.345	0.153	2230487
NT-21	339	0.066	1919583
PA-19	0.317	0.059	2907802
MN-3	0.311	0.137	2150763

Table 4G Congressional District by MNIQ

Congressional District (112)	MNIQ	MINQ	2008 D!11 Payments Received
VA-6	0.307	0.101	3060309
NC-4	0.3	0.17	2172210
OK -4	0.3	0.072	2892992
LA-1	0.293	0.06g	2!203,818
VA-9	0.28	0.037	2491A94
AL-6	0.279	0.096	2767560
IN-1	0.279	0.064	2,21)7,629
PA-12	0.276	0.012	1783964
MD-2	0.261	0.078	1412836
MN-6	0.251	0.044	2452676
PA-5	0.243	0.025	1736354
AZ-2	0.236	0.066	1346092
HI-2	0.233	0.07	1195509
PA-11	0.229	0.041	1415836
TX-25	0.226	0.128	1160131
MN-7	0.205	0.024	1374383
TX-6	0.191	0.11	1474,154
TX-26	0.165	0.095	1438,705
TX-8	0.142	0.06.3	1025034
WY-1	0.094	0.02	1153843

Discussion

Presidents since Theodore Roosevelt have tried to provide health care security for the American population. The development of the public health hospitals as well as the creation of Medicare and Medicaid attempted to supplement the employer based health care system. Congress and health economists have long realized that there are significant differences in the kinds of insurance, as well as the rate of uninsured as well as variation across congressional districts.[11,12] In their creation of DSH, Congress recognized that these variations

Citation: Mandel HC, Nunziato C. Public health ramifications of regional variation of DSH by congressional districts and state. *Int J Fam Commun Med.* 2018;2(4):229–236. DOI: 10.15406/ijfcm.2018.02.00085

could be extremely damaging to public health disproportionately across the country.[1] The politics of creating legislation that would provide affordable universal health insurance for all Americans in what some authors would call the largest domestic reform in 80 years was not lost on the architects of the Affordable Care Act, nor was the importance of rapidly addressing their goal in the first legislative cycle.[13] The death of Massachusetts Senator Edward Kennedy, and the election of Senator Scott Brown resulted in the House of Representatives accepting the Senate version of the bill without the planned conference committee that would have corrected significant flaws in the legislation. One major flaw in the bill is that the safety net providing health care access is extremely dependent on DSH---yet undocumented immigrants and new citizens who are impoverished often live in communities served by those hospitals. As both those populations would not be eligible for either Medicaid or the purchase of health insurance with subsidy through the health care exchanges, localities with significant percentages of those populations will not have the revenues to support their safety nets. We believe that we are the first researchers to analyze congressional districts by looking at both the variables of dependence on DSH revenue as well as proportion of population that will not be eligible to obtain health insurance and therefore will remain uninsured.

By creating two quotients, the MNQ and MNIQ, we have created a pragmatic tool that will allow health economists, safety net providers and public health officials to easily focus on those localities that we believe will have significant revenue shortfalls as ACA expands and unless rectified DSH levels decrease see Figures 1. As the Secretary of Health and Human Services was given some flexibility in applying the DSH decreases, it may allow planners in HHS another methodology in their analysis to lessen the potential public health harm created when those communities in greatest need of health care access are disproportionately affected. Peter Drucker analyzed in 1995 that (in Los Angeles) "immigration already exceeds what is socially and politically manageable".[14,15] Clearly, as our data indicates, districts like CA34 with $ 436,035,424 or NY11 with $ 304,22,492 in DSH per annum cannot cost shift $ 100 million decreases annually for the next several years. As the annual aggregate DSH reductions are back loaded, we believe that although there will be difficulties over the next few years, that unless rectified the safety net system in the high MNQ, as well as MNIQ districts will have serious financial difficulties starting in fiscal 2018.[16]

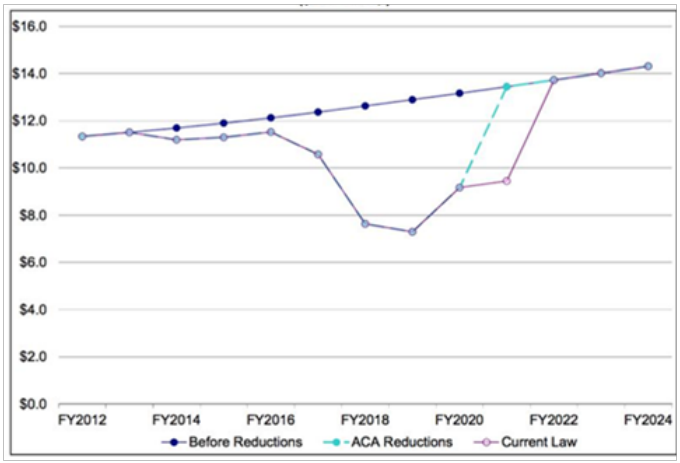

Figure 1 Total DSH Allotments before the Reductions, with the ACA Reductions, and under current Law.[2]

As the economics of the safety net are not specifically related to the immigrant populations, we did not analyze the CDs by population alone as did the Immigration Policy Center group, who looked at potential eligible recipients of the Dream Act. In cities of high population density, it is not uncommon for patients to travel significant distances to go to the safety net providers and hospitals, and therefore why we believe that DSH received must be a significant contributor to our quotients. Observationally, we noticed that states with large discrepancies between MNQ and MNIQ (TX and LA, for example) are also co-incidentally those that have refused to implement the Medicaid expansion. This will need to be explored by public health leaders in those states, as it possibly could become problematic as well. As the Secretary is mandated to decrease DSH, these states, and specific Congressional districts within those states like TX-9 - TX-30 that are currently dependent on DSH, will be under significant cost pressure. They will have to rely on lower DSH revenues to treat both indigent patients that were supposed to be shifted to Medicaid, as well as their high population of undocumented residents. We also believe this article is quite significant because it can offer members of Congress an easy to use new tool that could result in the avoidance of a public health nightmare. With the responsibilities to provide services mandated by EMTALA as well as PHA 330, if the ACA flaw is not corrected, our quotients can be used by state and county treasurers, bond insurers and underwriters to more accurately assess those localities that are at higher risk of default on their financial obligations. We also believe these communities will be hardest hit by increased waiting times to see primary care physicians and specialists and that our quotients will assist planners to focus on those communities to develop reasonable contingency plans.[17]

Acknowledgments

Comprehensive list of DSH payments were obtained from Medicaid State Plan Rate Year 2008 report. Hospitals were assigned to congressional districts with the help of the Sunlight Foundation and their publically available congressional district API. Demographic information was provided both by the US Census Bureau's American Community Survey as well as the Immigration Policy Center in partnership with Rob Paral and Associates.

Conflict of interest

The author declares there is no conflict of interest.

References

1. Jones J. Omnibus Budget Reconciliation Act of 1981; 1981.
2. Mitchell A. Medicaid Disproportionate Share Hospital Payments. *Congressional Research Service*. 2012;1–51.
3. Middle Class Tax Relief and Job Creation Act of 2012; 2012. p. 1–102.
4. Camp D. American Taxpayer Relief Act of 2012; 2013.
5. Health Reform Update - Provider Impact [Internet]. Jackson Kelly PLLC; 2010.
6. Fishman LE, Bentley JD. The evolution of support for safety-net hospitals. *Health Affairs*. 1997;16(4):30–47.
7. Passel J, Cohn D. Unauthorized Immigrant Population: National and State Trends. 2010; 2011.
8. http://www.immigrationpolicy.org/just-facts/who-and-where-dreamers-are
9. Hill LE, Johnson HP. Unauthorized Immigrants in California; 2011.

10. https://aspe.hhs.gov/basic-report/summary-immigrant-eligibility-restrictions-under-current-law

11. Newman D. Health Insurance Coverage by State and Congressional District; 2010, CRS 7-5700, R42055; 2011.

12. Kenney G, Lynch V, Zuckerman S, et al. *Variation in Insurance Coverage Across Congressional District*s. New Estimates from. Urban Institute. 2008.

13. Johnson HB and Broder DS The System: The American way of politics at the breaking point Little, Brown and Company 1996.

14. Drucker, PF Managing in a time of great change pg 155, Butterworth-Heinemann 1995.

15. Immigration Altercation June 28, 2013. *The Drucker Institute Claremont Graduate University*. 2013.

16. How do Medicaid DSH Payments Change Under the ACA, The Henry J. Kaiser Family Foundation; 2013.

17. Goodman JC. Why the doctor can't see you Wall Street Journal. 2012;15.

Citation: Mandel HC, Nunziato C. Public health ramifications of regional variation of DSH by congressional districts and state. *Int J Fam Commun Med.* 2018;2(4):229–236. DOI: 10.15406/ijfcm.2018.02.00085