ALS analysis in NY

Identification of Areas with High ALS

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January 27, 2025

Background

- The goal of the project/task is provide the most accurate and timely identification of areas experiencing an Acute labor Shortage in terms of Nurses in New York.
- The initial analysis consisted in comparing, by different categories, # of postings vs # of Hires by county.
  - High Hirings relative to posting would indicate a health labor market.
  - Low Hirings relative to postings would indicate a labor shortage.
- Main issues:
  - Postings do not relate to number of hires
    - Single posting can result in multiple hires. Some postings are never taken down, etc.
    - There is no proper hiring data. Data available consists on predictions and projections.

Change of Strategy

- In June 2024, a new set of regulations were stablished by the federal goverment, aiming change and improve the staffing standards for long term care facilities.
- The new regulations change the minimum staffing requirements for Registered Nurses (RN) and Nursis assistants (NA)
  - 3.48hrs per resident per day (Minimun total)
  - 0.55hrs per resident per day (RN)
  - 2.45hrs per resident per day (NA)

- More Importantly, they also stablished guidelinesto identify areas with Acute Labor Shortages (ALS), which would qualify providers for partial exemptions to the new requirements.
- From our perspective, we can use this guidelines to identify areas with ALS in NY.

Methodology

- The new methodolgy is as follows:[1]

    1. Using data from the BLS to identify total number of RNs and NAs
    2. Calculate Total population for the corresponding MSA. Data comes from the Census, where we can collect data at the county level.
    3. Calculate the RNs and NAs per capita
    4. Compare it to the National average (80%).

Logic:

- National level: assume the market is in equilibrium. However, locallly, some labor markets may be experiencing shortages, or surpluses.
- Total Supply is proxied by all personal working in specific occupations
- Total Demand is proxied by the population of the area (or Age Specific)
- Supply / demand $<$ 80% of national average, the area to have an ALS.

Limitations:

- Data is not timely. We are currently using 2020 to 2023 data. 2024 data its only partially available of population
- For OES data for 2024 is not available yet. Perhaps we can request it.

code	Occupation
29-1141	Registered Nurses
29-2061	Licensed Practical and Licensed
31-1131	Nursing Assistants

Results: 2023

[1] See pg 26 third column

Area	RN-65+	LPN-65+	NA-65+	RN-Tpop	LPN-Tpop	NA-Tpop
Albany-Schenectady-Troy, NY	110.95	126.03	95.32	121.72	138.3	104.6
Binghamton, NY	90.67	99.35	110.63	108.53	118.94	132.44
Buffalo-Cheektowaga-Niagara Falls, NY	107.12	140.83	89.62	122.26	160.78	102.3
Elmira, NY	**67.89**	200.79	95.46	80.35	237.71	113.0
Glens Falls, NY	**60.37**	101.92	**75.13**	81.13	137	100.99
Ithaca, NY	91.17	103.36	90.58	86.89	98.52	86.34
Kingston, NY	**44.62**	**68.99**	**39.61**	**55.22**	85.41	**49.04**
New York-Newark-Jersey City, NY-NJ-PA	97.51	86.04	98.75	97.45	86.02	98.71
Rochester, NY	95.11	126.61	95.85	108.26	144.15	109.12
Syracuse, NY	110.24	153.35	102.57	120.58	167.77	112.21
Utica-Rome, NY	**74.88**	162.89	110.06	87.7	190.82	128.92
Watertown-Fort Drum, NY	**48.55**	174.56	**58.72**	**42.93**	154.38	**51.93**
Capital/Northern New York nonmetropolitan area	**70.16**	105.49	**53.52**	82.69	124.36	**63.09**
Southwest New York nonmetropolitan area	**51.05**	115.24	**66.73**	**62.13**	140.26	81.22
Central East New York nonmetropolitan area	**48.9**	104.78	**60.69**	**62.89**	134.79	**78.06**

Results: 2022

Area	RN-65+	LPN-65+	NA-65+	RN-Tpop	LPN-Tpop	NA-Tpop
Albany-Schenectady-Troy, NY	110.49	126.62	96.45	120.84	138.51	105.51
Binghamton, NY	88.72	106.92	113.81	105.93	127.7	135.92
Buffalo-Cheektowaga-Niagara Falls, NY	107.91	131.11	81.61	122.38	148.73	92.57
Elmira, NY	92.74	114.98	118.12	110.0	136.42	140.13
Glens Falls, NY	**70.52**	101.16	83.35	93.7	134.44	110.76
Ithaca, NY	87.98	102.44	87.88	82.96	96.61	82.87
Kingston, NY	**46.28**	**66.03**	**40.7**	**57.07**	81.45	**50.2**
New York-Newark-Jersey City, NY-NJ-PA	99.0	85.57	100.06	98.44	85.1	99.51
Rochester, NY	101.16	114.39	106.13	114.26	129.23	119.89
Syracuse, NY	115.04	159.55	102.94	124.9	173.26	111.78
Utica-Rome, NY	**75.38**	164.44	102.11	88.62	193.39	120.08

Area	RN-65+	LPN-65+	NA-65+	RN-Tpop	LPN-Tpop	NA-Tpop
Watertown-Fort Drum, NY	**51.62**	187.43	**59.9**	**45.53**	165.36	**52.84**
Capital/Northern New York nonmetropolitan area	**69.88**	108.65	**55.85**	82.36	128.1	**65.84**
Southwest New York nonmetropolitan area	**51.18**	115.37	**73.75**	**62.19**	140.24	89.64
Central East New York nonmetropolitan area	**50.11**	99.73	**61.17**	**64.22**	127.84	**78.4**

Results: 2021

Area	RN-65+	LPN-65+	NA-65+	RN-Tpop	LPN-Tpop	NA-Tpop
Albany-Schenectady-Troy, NY	112.53	117.39	103.43	122.64	127.92	112.68
Binghamton, NY	99.51	98.82	133.55	118.68	117.85	159.23
Buffalo-Cheektowaga-Niagara Falls, NY	109.43	136.16	93.32	123.23	153.31	105.06
Elmira, NY	90.56	143.46	116.0	106.54	168.77	136.43
Glens Falls, NY	**65.94**	105.49	90.31	87.14	139.4	119.32
Ithaca, NY	86.72	121.53	97.41	80.39	112.66	90.28
Kingston, NY	**39.41**	**71.68**	**44.87**	**48.21**	87.69	**54.88**
New York-Newark-Jersey City, NY-NJ-PA	97.47	86.52	101.94	96.26	85.44	100.64
Rochester, NY	98.53	132.09	105.01	110.58	148.23	117.82
Syracuse, NY	119.81	166.87	111.14	129.28	180.06	119.89
Utica-Rome, NY	80.9	176.29	112.07	95.4	207.87	132.12
Watertown-Fort Drum, NY	85.85	209.11	106.4	**74.74**	182.04	92.6
Capital/Northern New York nonmetropolitan area	**75.87**	109.27	**76.34**	88.94	128.09	89.46
Southwest New York nonmetropolitan area	**50.78**	122.85	**76.09**	**61.52**	148.82	92.15
Central East New York nonmetropolitan area	**54.32**	95.71	**69.86**	**69.29**	122.08	89.09