Louisiana’s Multi-Regional Statewide Nursing Workforce Forecasting Model 2014 Update

Description
The Louisiana Multi-Regional Statewide Nursing Workforce Forecasting Model is a unique approach to predicting the supply and demand for all levels of licensed professional nursing workforce including registered nurses (RNs), advanced practice registered nurses (APRNs), and licensed practical nurses (LPNs). There are 27 separate models (RN, APRN and LPN) covering eight regional labor market areas with one state model of aggregated data for each level of nursing workforce. The Northeast Ohio Nursing Initiative (NEONI) Forecasting Model was used as a template for Louisiana’s Multi-Regional Statewide Nursing Workforce Forecasting Model (2013).

Design Features
- Operates on a series of Excel spreadsheets connected by specific mathematical relationships incorporating multiple data bases of information related to nurse licensure, demographics, and patient care utilization across multiple settings.
- Sixteen adjustable settings are embedded within each regional model which allows hypothetical testing situations based on specific variables.
- Measures nurses as full-time equivalents (FTEs) or 40 hours/week.
- Functional through 2020 and can be updated annually with new licensure data and other relevant data as needed.

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Key Findings

RNs
- Fifty-seven percent of RNs are employed in Louisiana hospitals.
- Almost 10 percent of RNs are unemployed or choose not to work.
- 2014 shows a shortage of full-time equivalent (FTE) RNs: a supply of 41,393 (FTE) RNs compared to a demand of 45,982 resulting in an unfilled gap of 4,589 (FTE) RNs that varies significantly by region.
- Shortages will exist through 2020 in Baton Rouge, Lafayette, and New Orleans regional labor market areas (RLMAs).
- A statewide shortage for RNs is expected to continue through 2020 based on current conditions.*

*Changes in health care policy/health care reform, patient care delivery, nurse intensity, or population shift will affect demand for RNs, APRNs, and LPNs

APRNs
- The demand for APRNs (FTEs) in 2014 is estimated at 5,558, with a supply of 4,186, leaving a gap of 1,372 FTEs. The ultimate size of this gap over the next decade will depend on the changing patterns of APRN utilization and healthcare policy as we go forward.
- Based on the current intensity (nurse-to-healthcare-unit ratio) for APRNs in Louisiana and a growth rate of 4% annually for APRNs in both the inpatient and ambulatory care settings, the demand for APRNs will exceed 7,000 FTEs by 2020.
- There will be a demand for APRNs through 2020 in the following RLMAs: Baton Rouge, Houma, Lafayette, Lake Charles, New Orleans, and Shreveport.

LPNs
- The majority of LPNs continue to be employed in long-term care facilities/extended care/assisted living (6,685) and hospitals (3,809).
- There will be a shortage of LPNs through 2020 in the following RLMAs: Baton Rouge, Houma, Lake Charles, New Orleans, and Shreveport.
- A surplus in the number of FTE LPNs will extend through 2020 in the Alexandria, Lafayette, and Monroe RLMAs.