

Title: Immunization access through pharmacies located in low income, medically underserved areas

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Purpose: In analysis of data from a 2012 telephone survey of immunizing pharmacies in the Omaha Nebraska metropolitan area we assessed service availability based on geographic economic characteristics from the American Community Survey (U.S. Census Bureau).

Design: We assessed the number of immunizing pharmacies located in medically underserved areas, and in zip codes by percent of population living below the federal poverty limit (FPL). Statistical analysis was conducted in SPSS.

Findings: All 84 immunizing pharmacies provided influenza vaccine; varying proportions provided other commonly recommended adult immunizations. In 16 zip codes with low poverty levels (< 10% FPL), 88% of surveyed pharmacies (43/49) offered immunization services. Among 13 zip codes with moderate poverty levels (10 – 24% FPL), 74% of pharmacies (34/46) immunized. In 9 high poverty zip codes (25%-63% FPL), 78% of pharmacies (7/9) immunized. Most immunizing pharmacies (86%) were in designated medically underserved areas (MUAs) for high poverty zip codes, compared to 18% and 5% in moderate and low poverty areas. Immunizing pharmacy distribution was 0.27, 0.23, and 0.24 per square mile, and 0.81, 1.68 and 1.64 per 10,000 population by high, moderate or low poverty levels. Pharmacies in high, moderate and low poverty areas, respectively, offered the following vaccines: Pneumococcal: 86%, 79%, 77%; Shingles: 100%, 77%, 74%; and Tdap: 86%, 62%, 63%.

Implications: There were similar numbers of pharmacies available per square mile in high poverty areas, but twice the average population per pharmacy compared to lower poverty areas. Literature suggests that pharmacy capacity can be increased fairly readily for larger immunization demand. Immunizing pharmacies in high poverty areas were more likely to provide commonly recommended adult vaccines versus the moderate and high income areas. Pharmacies constitute an excellent access point for adult immunizations, with good geographic availability in high poverty areas.