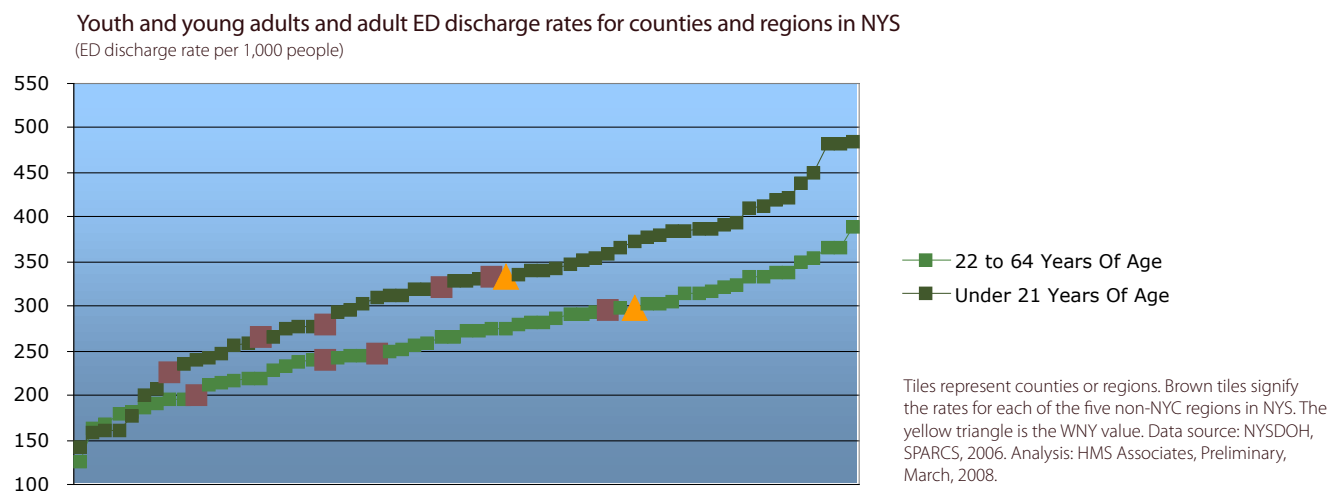


THE UNINSURED AND THE EMERGENCY DEPARTMENT SAFETY-NET

The uninsured are one of the major challenges facing communities and health care service providers. Nationally, hospital EDs are a major source of care for this group and a key component of the health care safety-net. Data and benchmarks on the uninsureds use of EDs informs decision-makers about this critical gap and helps to shape appropriate solutions.



Western New York

In 2006, approximately 466,000 Western NY residents were discharged from hospital EDs located in New York State. From a regional context, that equalled a use rate of 333.2 discharges per 1,000 youth and teenagers and a rate of 298.4 discharges for adults. These are the highest use rates of the five non-NYC regions in NYS. Of that number, approximately 8.9% or 41,267 residents were billed as self-pay and “uninsured”. The expressed need for this service by this medically underserved population varies considerably by county, community, hospital ED and medical need.

This HMS Associates briefing is the first in a series on the uninsured and ED use in WNY. Subsequent briefs will examine use more closely by age groups, primary diagnoses, and charges. The purpose of this community service is two-fold: 1. Provision of current actual data and benchmarks on WNY community health care needs and problems, and, 2. Stimulation of fact based discussions between local stakeholders on local solutions addressing critical local health system needs.

The WNY regional and county picture obscures significant need at the community level.

Uninsured and Self-pay

One out of every eleven or 8.9% of WNY patients, discharged from hospital Emergency Departments in NYS is uninsured. Slightly less than one out of three of these patients are under 21 years of age: 12,138 are in that age group; and 28,793 are between 22 and 64 years of age. Very few people over 65 are uninsured and adult use is more prevalent among uninsured males than females, unlike use rates for all payer groups. Other regions with higher rates of uninsurance, experience higher ED use rates by the uninsured.

WNY hospital ED uninsured use rates vary and the total hospital bottom line may be negatively impacted by as much as \$6.5M each year due to associated bad debt. Additionally, needed follow-up health care is less likely to occur because the emergency medical need has been treated and lack of insurance coverage keeps patients at home.

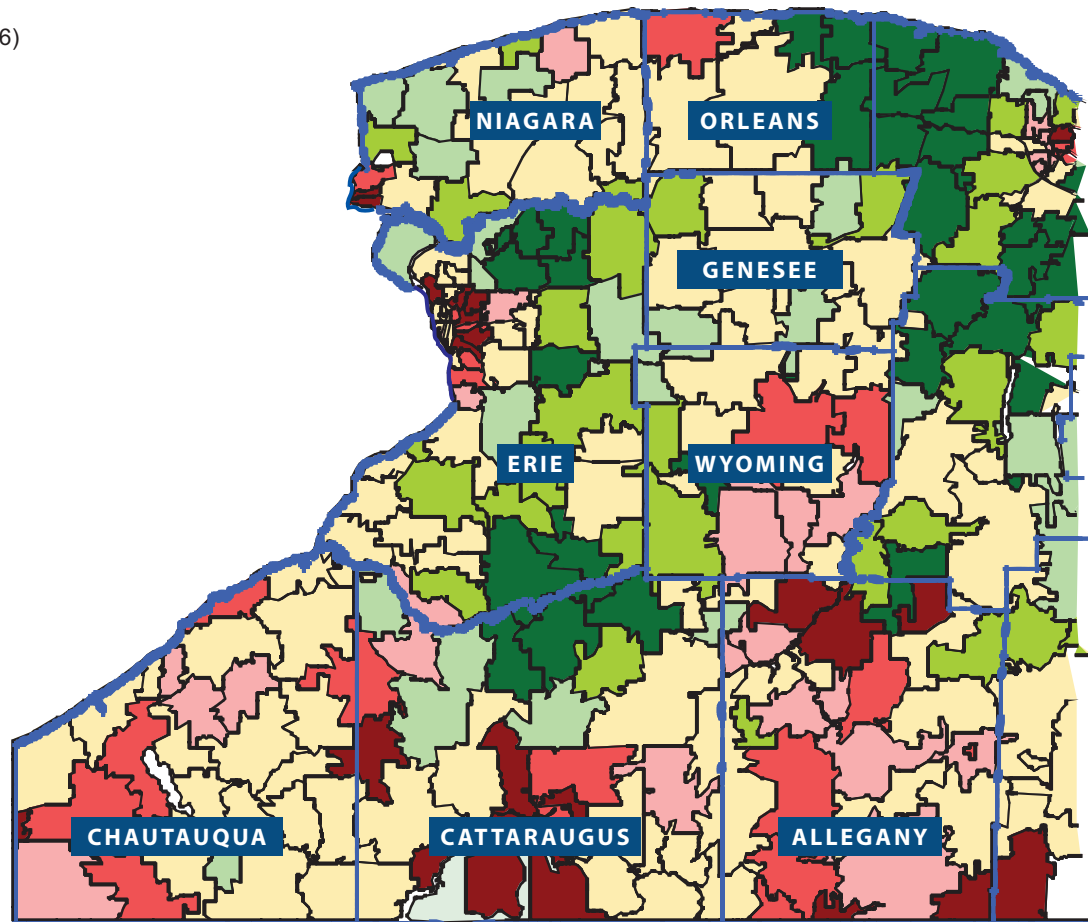
Although the largest number of uninsured ED patients are in urban areas, many Western New York rural communities are also significantly challenged for services to the uninsured.

Uninsured reliance upon hospital ED safety-net by WNY Zip Code

ED Self Pay Proportion (2006)

Rankings: Regional -- Ages: All

- No Visits
- 1st decile (90-100)
- 2nd decile (80-90)
- 3rd decile (70-80)
- 4th decile (60-70)
- 5th decile (50-60)
- 6th decile (40-50)
- 7th decile (30-40)
- 8th decile (20-30)
- 9th decile (10-20)
- 10th decile (0-10)



Uninsured Reliance on EDs

Hospital ED safety-net reliance by the uninsured is related to the characteristics of the community, the proximity of the community to the hospital and the hospital's community service role and scope of service.

The uninsured in WNY counties and communities rely upon hospital EDs as sources of medical care in varying degrees. Communities with high reliance in WNY are present in six of the eight counties, with Genesee and Orleans County having communities with the lowest uninsured ED use rates. Uninsurance in WNY appears to be located more so in low income urban communities as well as in rural areas throughout the southern tier. The cities of Buffalo, Niagara Falls and the Salamanca area have the highest rates of ED use by the uninsured.

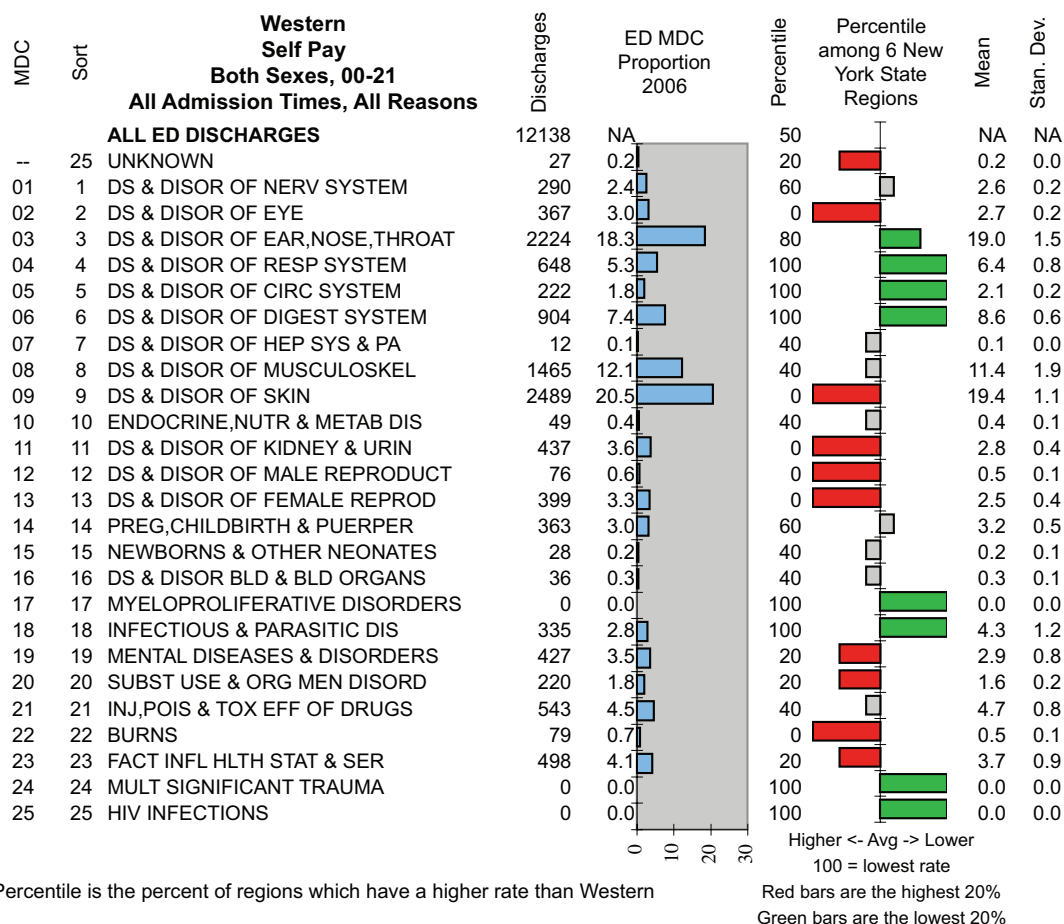
Higher income communities with presumably lower rates of uninsurance, such as Lewiston and Amherst, do not demonstrate high reliance on EDs for service to the uninsured although hospitals are located there.

The color and shading in the Zip code map portrays level of uninsured reliance (decile) on the hospital ED safety-net. The darker the shading in red, the higher the use and the darker the shading in green, the lower the uninsured reliance upon the hospital ED safety-net. Areas in beige experience "average" use rates.

The map shows that although the largest number of users are in urban areas, many rural areas are also significantly challenged for services for the uninsured.

WNY uninsured youth and teenagers medical needs differ in several ways from youth and teenagers that are uninsured in other parts of the state.

Sample Profile: Western New York Region Comparison: Youth and teenagers percent of ED discharges by Major Diagnostic Classification



Medical Needs of the Uninsured - Under 21 Years Of Age

Disorders of the eye, skin, kidney and urinary system, female reproductive system and burns are more common in WNY than other regions of NYS for the youthful uninsured. On the other hand, respiratory, circulatory and digestive system and infectious and parasitic disorders are less common. This clinical profile presents principle diagnosis data by Major Diagnostic Category and depicts the proportion of youth and teens treated for that particular medical problem within the uninsured payer category. A percentile of 0 is the highest rate in comparison to other regions and a percentile of 100, the lowest. A corollary analysis shows that uninsured youth

and teenagers experience more substance abuse, female reproductive system, and child birth related medical problems and less newborn, infectious disease and endocrine related problems than all youth and teens from WNY treated in the hospital ED safety-net in NYS. Medical needs of uninsured Western New York adults also varied with the statewide experience.

Summary of Observations and Interpretations

- Ω Community health centers and other clinics are critical safety-net resources for the uninsured. Due to the source of this data - NYS hospitals - their significant services to this population are not reflected in this analysis.
- Ω The Western New York region relies heavily upon the hospital Emergency Department safety-net as a source of medical care. Approximately 460,000 people were served in 2006 and the region has the highest population based use rate for hospital ED services in the state, exclusive of NYC.
- Ω Approximately 42,000 Western New York residents with no insurance sought health care at hospital EDs in NYS in 2006. This means that 1 out of every 33 WNY residents have health care problems severe enough to actually seek health care even though they have no insurance.
- Ω Uninsurance rates for the adult population found in other studies for WNY vary from 9 to 20%. In the opinion of HMS Associates, the low uninsured ED use rate finding for WNY is influenced and distorted by that low uninsurance rate and the high overall use rate. However, this warrants further analysis and interpretation.
- Ω Public assisted health care coverage is far more readily available for youth and teenagers than the adult population in general. Yet, 8% of youthful ED users had no insurance and this finding - significant use by uninsured youthful residents, is consistent with the NYS experience as a whole.
- Ω Different medical need profiles emerged for uninsured youth and teenagers in comparison to all WNY youth and teenagers treated in hospital EDs.
- Ω The uninsureds reliance upon the hospital ED safety-net is not limited to urban areas of the region. Clearly the bulk of uninsured reside in urban centers yet significant use by the uninsured was found in many rural WNY communities.

HMS Associates

HMS Associates, founded in 1990 in suburban Buffalo, NY, is a national consultative services firm which has served clients in sixteen states. Health related informatics, multi-variate health needs assessments and benefits driven health care network development and management are our core services. Contact us at (716) 688-8448 or see www.askhms.com.

Preliminary, March 2008. Do not cite or distribute without written permission from HMS Associates.

All rights reserved.