Emergency Department Use in New York City: A Substitute for Primary Care?

For the uninsured and many low-income people, hospital emergency departments (EDs) are a crucial entryway to the health care system. New York City's uninsured—27 percent of the nonelderly population in 1998, up from 20 percent in 1990—rely heavily on the ED for their medical care. Residents who regularly get their health care at an ED do not have regular doctors or continuity in their care, use costlier services, and often receive treatment that could have been avoided. Low-income New Yorkers may be depending on emergency department care even more as Medicaid enrollment declines and physician reimbursement rates are cut. This Issue Brief describes patterns of ED use throughout New York City and discusses some of the ways to improve the availability of primary care services and reduce ED dependency.

Profiling ED Use in New York City

With support from The Commonwealth Fund, the New York University (NYU) Center for Health and Public Service Research and the United Hospital Fund of New York jointly developed a classification system for emergency department use and reviewed approximately 6 million records of patients who used the city's hospital EDs in 1994 and 1998. The system identifies four categories of patients:

- **nonemergent.** The patient's initial complaint, vitals signs, medical history, and age indicated that immediate medical care was not required within 12 hours.

- **emergent/primary care treatable.** Treatment was required within 12 hours, but care could have been provided in a primary care setting. The complaint did not require continuous observation, and no procedures were performed or resources used that are not available in a primary care setting (e.g., CAT scan or certain lab tests).
Excluding patients admitted to the hospital, three-quarters of all ED visits to New York hospitals in 1998 were for conditions that were either nonemergent or emergent but treatable in a primary care setting.

- **Emergent ED care needed but preventable/avoidable.** Emergency care was required based on the complaint or procedures or resources used, but the emergent nature of the condition was potentially preventable or avoidable if timely and effective primary care had been provided (e.g., flare-ups of asthma, diabetes, or congestive heart disease).

- **Emergent ED care needed, not preventable/avoidable.** Emergency care was required and primary care treatment could not have prevented the condition (e.g., trauma, appendicitis, or heart attack).

**EDs Provide Primary Care and Emergency Care That Was Preventable**

Excluding ED patients who were admitted to the hospital, three-quarters of all ED visits to New York hospitals in 1998 were for conditions that were either nonemergent (41%) or emergent but treatable in a primary care setting (34%). Another 7 percent of visits required care in the ED but were potentially preventable (Figure 1).

Rates were high for both children and adults; nearly 42 percent of both children and nonelderly adults used the emergency department for nonemergent care (Figure 2). Another third of ED use by children (36%) and adults (32%) was emergent but could have been treated in a primary care setting. Nearly 8 percent of children and 7 percent of adults required ED care that was potentially preventable. Although a higher proportion of ED use by the elderly was for needed emergency care (32%), 37 percent was for nonemergent care and 32 percent was for an emergent condition treatable in a primary care setting.

Dependence on hospital emergency departments for primary care has remained steady despite efforts to build primary care capacity. ED utilization in 1994 and 1998 was similar. In both years, nearly 75 percent of emergency care was for nonemergent or primary care treatable conditions. There was a small decline in the percentage of preventable/avoidable cases where ED care was needed, but this change was offset by a slight increase in nonpreventable cases.
Neighborhood Differences in ED Use

An examination of ED use for nonemergent care by zip code reveals substantial variations across New York City neighborhoods (Figure 3). Areas of the city with particularly high ED use for primary care treatable conditions may suffer from a lack of primary care resources or from subpar care. High rates may also reflect the care-seeking behaviors and preferences of some patients.

Nonemergent visits to EDs are especially common among fee-for-service Medicaid beneficiaries living in low-income neighborhoods like Central Harlem and the South Bronx, as well as in some middle-income areas of Queens and Staten Island, where Medicaid patients may be isolated from Medicaid providers. Similar patterns exist among uninsured, or “self-pay,” patients, although rates for Staten Island are lower (Figure 4). In Queens, some of the high-use neighborhoods have high concentrations of immigrants, perhaps an indication that these populations lack a connection to the primary care delivery system.

A Rational Response to an Irrational System?

Four of five visits to hospital emergency departments in New York City are for nonemergent conditions, for care that could otherwise be provided in a primary care setting, or for potentially preventable conditions. These data alone, however, do not necessarily mean that ED utilization patterns in New York City are inappropriate.

Much of what may seem like misuse of emergency services may actually be a reasonable response to an underdeveloped primary care delivery system that is failing to meet patients’ needs. Such use of EDs may also...

---

**FIGURE 2**

New York City Emergency Department Utilization Patterns
Nonadmitted Patients, 1994 and 1998

<table>
<thead>
<tr>
<th></th>
<th>Nonemergent</th>
<th>Emergent, Primary Care Treatable</th>
<th>Emergent ED Care Needed, Preventable/Not Preventable/Avoidable</th>
<th>All ED Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Patients</td>
<td>41.3%</td>
<td>33.5%</td>
<td>7.3%</td>
<td>17.9%</td>
</tr>
<tr>
<td>1998</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children 0–17</td>
<td>41.6%</td>
<td>36.0%</td>
<td>7.6%</td>
<td>14.8%</td>
</tr>
<tr>
<td>Adults 18–64</td>
<td>41.7%</td>
<td>32.4%</td>
<td>7.1%</td>
<td>18.8%</td>
</tr>
<tr>
<td>Elderly 65+</td>
<td>36.6%</td>
<td>31.9%</td>
<td>7.7%</td>
<td>23.8%</td>
</tr>
</tbody>
</table>

All Patients | 41.2%       | 33.6%                           | 8.5%                                                          | 16.7%         | 100%          |
| 1994      |             |                                 |                                                               |               |
| Children 0–17 | 42.3%       | 35.8%                           | 9.0%                                                          | 12.9%         | 100%          |
| Adults 18–64 | 41.2%       | 32.6%                           | 8.1%                                                          | 18.1%         | 100%          |
| Elderly 65+ | 36.2%       | 30.5%                           | 9.1%                                                          | 24.2%         | 100%          |

Source: Commonwealth Fund-supported analysis of New York City electronic ED records by the NYU Center for Health and Public Service Research and the United Hospital Fund of New York
Obtaining immediate access to care in an ED may make good sense if telephone consultation is unavailable, the wait in the local clinic is three hours, or the clinic is closed at night.

...continued from page 3

reflect the fears and uncertainties inherent in coping with an illness. For a parent of a child with high fever or abdominal pain, obtaining immediate access to care in an ED may make good sense if telephone consultation is unavailable, the wait in the local clinic is three hours, or the clinic is closed at night. Furthermore, not all ED use for primary care treatable conditions is necessarily economically inefficient. Emergency departments provide round-the-clock services, and more cost-effective use of their standby and downtime capacity could make financial sense in an environment where payment rates and incentives were more rational.

Improving Primary Care Delivery

There are a number of changes that would improve primary care and reduce reliance on EDs:

- Clinics and other health care providers could increase the availability of nighttime and weekend hours and extend their telephone consultation capacity.
- Physicians could devote more time to educating their patients about how to manage chronic conditions like asthma and diabetes.

FIGURE 3

Percent of Nonadmitted ED Visits by Medicaid Patients for Nonemergent Care, 1998

All Ages

Source: Commonwealth Fund-supported analysis of New York City electronic ED records by the NYU Center for Health and Public Service Research and the United Hospital Fund of New York
Clinics could reduce long waits for care that discourage the sick from seeking treatment early in an episode of illness.

Primary care services could be made more responsive to patient preferences.

State and federal subsidies to primary care clinics could be increased to ensure the continued availability of these sources of care.

Hospitals and city health officials could initiate efforts to identify patients who repeatedly use the emergency department for primary care, improve communication between EDs and primary care providers about these visits, and establish links to primary care for patients who lack them.

Researchers could continue to analyze ED use to detect any further erosion of primary care availability in New York City.

---

**FIGURE 4**

Percent of Nonadmitted ED Visits by Self Pay/Uninsured Patients for Nonemergent Care, 1998

All Ages

Source: Commonwealth Fund-supported analysis of New York City electronic ED records by the NYU Center for Health and Public Service Research and the United Hospital Fund of New York