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RIte Stats

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Director's Message

This issue of RIte Stats focuses on services provided to RIte Care members in hospital-based emergency departments (ED). It is an update to a previous RIte Stats (January 2002) on ED utilization and includes a more detailed section on diagnoses treated in the ED. Tracking utilization of these services is essential to our oversight and monitoring of RIte Care as high rates of ED utilization are costly and can be symptomatic of broader problems with access to primary and urgent care. It is hoped that you will find this report informative and useful for policy initiatives related to these important services.

Best regards,

Ronald A. Lebel, Director
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Emergency Department Utilization: 2005

Background

Prior to RIte Care, annual ED utilization rates in the Rhode Island Medicaid program were well over 700 visits per 1,000 and much higher in some age groups. During the early years of RIte Care, we made dramatic improvement in enhancing the primary care network in the state and ED utilization rates went down to about 450-500 visits per 1,000. In recent years, rates have started to increase again, possibly due to interpretations and enforcement of federal guidelines on the Emergency Medical Treatment and Active Labor Act (EMTALA)[1] legislation which requires hospitals to provide appropriate screening and treatment for all patients seen in ED. Furthermore, EMTALA imposes severe penalties on hospitals that do not comply.

In this report, we will examine recent trends in ED utilization rates in RIte Care with comparisons by health plan and noting differences by age and gender group. Special attention will be given to specific diagnoses treated in the ED as well as the overall costs of these services.

RIteCare

Improving Access to Health Care for Rhode Islanders

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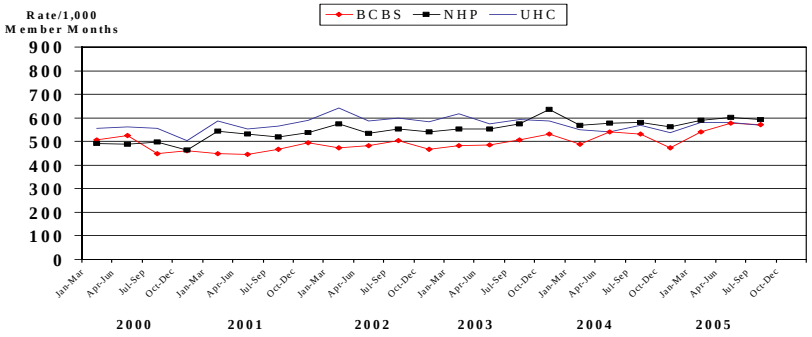
Trends in ED Utilization

All utilization rates are monitored quarterly by the Center for Child and Family Health (CCFH) and standardized to an annual rate per 1,000 member months. Figure 1 illustrates quarterly rates in ED utilization for the core RIte Care Population (see Technical Notes) by health plan from calendar year 2000 through 3rd quarter calendar year 2005. Note that there is evidence of seasonal variation in ED rates (i.e., rates are sometimes higher in the winter months). Also, members enrolled with Blue Cross and Blue Shield generally had rates lower than the other two plans during much of the time under study. However, in recent quarters, all health plans appear to be converging at of rate of approximately 590 visits per 1,000 member months.

Figure 1. Visits to Hospital-Based Emergency Departments Annualized per 1,000 Member Months by Quarter and Health Plan. Core RIte Care Population Calendar Year 2000-2005



There are notable differences in rates by age and gender groups (data not shown). For example, rates are highest among women 15-44 (approximately 850 visits per 1,000) due primarily to conditions related to pregnancy and lowest among children 6-14 (approximately 300 per 1,000). Infants (i.e., children < 12 months old) have utilization rates which approach 700 visits per 1,000. Otherwise, males 15-44 and all members over 44 have similar rates which average about 450-500 visits per 1,000 member months.

These rates are much lower than pre-RIte Care rates and national fee-for-service Medicaid rates[2] which generally range from 700-750 visits per 1,000 population. However, they are much higher than rates found in commercial insurance which are closer to 200 visits per 1,000 and somewhat higher than the program objective of 450 per 1,000, a target that was set when this population was moved into managed care.

While there are several reasons cited for these disparities, the imposition of co-pays within the commercial population is one of the most compelling. Commercial insurers generally charge a fairly substantial co-pay (up to $100) for ED visits which has been shown to effectively reduce ED utilization in several populations.[3] Medicaid programs, in the past, have been restricted by federal regulation from using financial incentives to manage ED utilization. Other systemic issues include the availability of after-hours coverage in some pediatric practices, health centers and hospital clinics.

On the other hand, there may be population characteristics that make Medicaid recipients more likely to use a hospital-based ED when they or their children are sick.[4-5] For example, Medicaid recipients are more likely to live in inner-city neighborhoods and it may be that the local hospital is more accessible than their primary care physician's office. There is also evidence to suggest that Medicaid recipients may not be able to take time off work to take their children to the doctors during the day.[5] As such, Medicaid parents may have to wait until evening to care for their sick child using the only services that are available at that time.

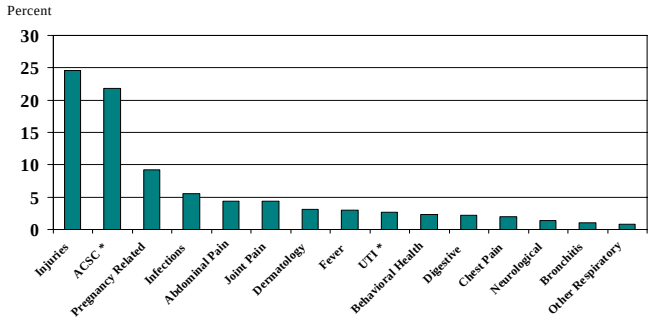
Hospital-based EDs are not always the most preferable site of care even when patients are sick. Patients seen in hospital-based EDs have to wait an average of 3.5 hours to be treated and the wait can be much longer for non-urgent conditions.[6] Clearly, outpatient options can be more timely and can provide better continuity of care.

Top 15 Conditions Treated in EDs

Figure 2 illustrates the top 15 diagnoses treated in the ED for the core RIte Care population during SFY 2005 (July 1, 2004—June 30, 2005). While accidents and injuries are the most common diagnosis (constituting almost 25% of all ED visits), diagnoses considered to be ambulatory care sensitive conditions constitute over 20% of all ED visits (see next section for more detail on these diagnoses). Conditions related to pregnancy are also a very common diagnosis, accounting for almost 10% of the visits.

Beyond these top 3 diagnostic categories, the distribution of conditions treated in the ED take on a more consistent pattern. Infections, abdominal and joint pain each constitute approximately 5% of all visits followed by dermatology (which includes skin rashes), fevers and urinary tract infections. Mental health diagnoses (which include alcohol and drug abuse) are among the more common conditions treated in this population as are chest pain, digestive and neurological symptoms. Bronchitis and other respiratory diagnoses are also among the top 15 diagnoses.

Figure 2. Top 15 Conditions Treated in Hospital-Based Emergency Departments: Core RIte Care Population SFY 2005



•Note: ACSC= Ambulatory Care Sensitive Conditions. See text for further explanation.
•UTI= Urinary Tract Infections.

Ambulatory Care Sensitive Conditions (ACSC)

Many of the conditions treated in the ED are considered to be ambulatory care sensitive which means that it is believed that the need for treatment could have been avoided with effective primary care management or the episode of care could have been diverted to other, less costly and perhaps more appropriate, outpatient settings such as a physician's office. Table 1 shows the diagnoses that are included in this category[7] as well as their frequency and proportion within this category of services. Note that while over 20% of ED visits fall into this category of care, noticable progress has been made in reducing ED visits for many ACSC conditions such as asthma and other respiratory conditions.

Table 1. Ambulatory Care Sensitive Conditions Treated in Hospital-Based Emergency Departments among RIte Care Core Population: SFY 2005

Diagnosis	#	%
Otitis Media	2,502	16.9%
Upper Respiratory Infections	2,185	14.8%
Pharyngitis	1,785	12.1%
Digestive Disorders	1,609	10.9%
Asthma	1,465	9.89%
Urinary Tract Infections	1,098	7.42%
Gastroenteritis	1,021	6.90%
Bronchitis	835	5.64%
Dermatology	736	4.97%
Pneumonia	475	3.21%
Volume Depletion	412	2.78%
Other Febrile Symptoms	316	2.13%
Tonsilitis	197	1.33%
Other	71	0.5%
Total	14,807	

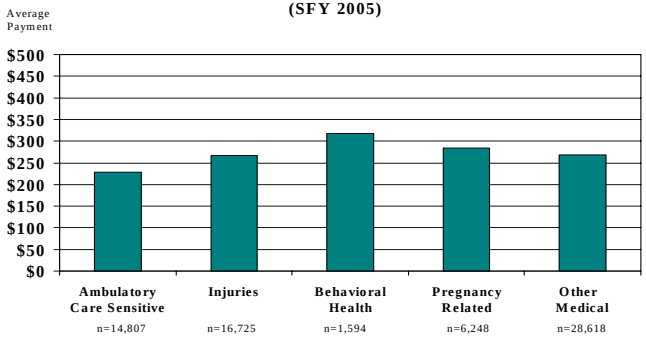
Otitis media, upper respiratory infections, and pharyngitis are good examples of conditions that might have been treated more effectively in a physician's office at a fraction of the cost of an ED visit. For example, treatment in a more appropriate setting would avoid the extended waits that often accompany visits to the ED—especially when patients have symptoms that are not life threatening. Collectively, these three diagnostic categories make up over 40% of all ACSC treated in EDs.

Asthma, pneumonia and volume depletion, on the other hand, are good examples of conditions that could be avoided through proper primary care case management. Asthma, for example, is a common chronic disease among children that is generally considered manageable with proper outpatient treatment (i.e., the standard of care is for children who are properly managed to be symptom free).[8] Similarly, respiratory conditions leading to pneumonia and dehydrations leading to volume depletions sufficient to go to an ED ought to be treated in an outpatient setting before they become so severe. The distribution of 'nonurgent' diagnoses seen here is similar to national trends.[6] (see Figure 4)

Costs

During SFY 2005, the health plans paid over $17.8 million in hospital claims for services provided to RIte Care members in ED settings (an average of $262 per visit). Figure 3 illustrates the average cost per visit by treatment category for SFY 2005. Note that behavioral health diagnoses are the most costly services averaging over $300 per visit. Pregnancy related conditions are not only expensive (average cost of $275) but also potentially treatable in less costly settings. Injuries and other medical conditions run about $260 per visit. Although ambulatory care sensitive conditions are the least costly on a per visit basis, they are believed to be treatable in provider settings where they would be considerably less costly.

Figure 3. Average Payments per Emergency Department Visit by Treatment Category: Core RIte Care Population (SFY 2005)



Note: Ambulatory Care Sensitive Conditions include diagnoses that could be treated just as well in a physician's office.

Summary

ED utilization rates in RIte Care have increased in the past several years to about 590 visits per 1,000 member months per year and these rates are similar for the three participating health plans. These ED utilization rates are considerably lower than national data for fee-for-service Medicaid populations, but they are still higher than rates in commercial settings and remain higher than program goals of 450 visits/1,000. Approximately 20% of RIte Care ED utilization is for conditions that are considered avoidable or treatable in other less costly and more timely settings. During SFY 2005, the health plans paid $17.8 million in facility claims for ED services at an average cost of $262.

Current Activities

Since the advent of RIte Care, DHS/CCFH have worked extensively with health plans to address both the systemic and population issues contributing to high ED rates. Recent efforts include a number of innovative programs such as increasing regular business hours in primary care clinics and improved triage in the ED itself. In addition, the Deficit Reduction Act (DRA) allows states to consider copays of up to $25 for certain types of ED visits. Reports from each health plan are anticipated in early summer and CCFH looks forward to continuing its work with the plans to improve the ED rate. However, it appears that without greater authority to impose cost sharing options, Medicaid programs will have a difficult time effecting needed reduction in preventable ED utilization.

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Program Description

RIte Care is the State of Rhode Island's managed health care program for families on Medicaid, uninsured families with incomes up to 185% of the Federal Poverty Level (FPL), uninsured pregnant women and children under 19 from families with incomes up to 250% of the FPL. Eligible individuals are enrolled in a managed care organization (MCO or Health Plan) which is paid a monthly capitation rate for providing or arranging health services for members. Eligibility for RIte Care is generally redetermined at twelve-month intervals. The program was designed to improve access to health care by providing each member with a 'medical home' in the form of a primary care provider (PCP).

Technical Notes

Emergency Department services are identified from institutional claims that are submitted quarterly to the State by the Health Plans. A claim is recognized as an ED visit if it is billed with a revenue code 450-459 in any revenue code field and no revenue code less than 220. The latter restriction eliminates inpatient stays that started in the ED. As such, our definition of ED visits includes all services provided in hospital-based ED that did not result in an inpatient admission.

The study population in this report has been limited to the 'core' RIte Care population and excludes populations such as children enrolled in foster care, adoption subsidy, SSI and Katie Beckett.

All rates are reported per 1,000 member months per year which is calculated as the sum of all days enrolled divided by 30 (to get member months) and annualized by multiplying by 12.

RIte Stats is a quarterly publication of the Center for Child and Family Health and is intended to provide information to the public on the health services provided to the RIte Care Program. It is edited by Bill McQuade, ScD, MPH in conjunction with an editorial board. Comments and inquiries are encouraged and should be sent to:

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