Original article

The Use and Out-of-Pocket Cost of Urgent Care Clinics and Retail-Based Clinics by Adolescents and Young Adults Compared With Children

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A B S T R A C T

Purpose: We describe the use and out-of-pocket cost of urgent care clinics (UCCs) and retail-based clinics (RBCs) as ambulatory care alternatives to physician offices among children, adolescents, and young adults, and examine differences in use by age.
Methods: Cross-sectional analysis describing diagnoses and out-of-pocket costs for 8.9 million UCC, RBC, and physician office encounters by privately insured child (aged <11 years), adolescent (aged 11 –18 years), and young adult (aged 19–30 years) beneficiaries in a U.S. national administrative data set from January to June 2013. We calculate relative odds (RO) of UCC and RBC utilization by adolescents and young adults, using physician office encounters and children as reference groups.
Results: UCC (n = 286,144) and RBC (n = 89,903) visits were <5% of encounters. Upper respiratory infections were the most common diagnosis at UCCs (children 25.2%, adolescents 27.3%, young adults 26.5%) and RBCs (38.1%, 44.1%, 42.0%). The mean out-of-pocket cost was higher for UCCs (children +$38, adolescents +$29, young adults +$25) and lower for RBCs (−$4, −$15, −$18) compared with physician office encounters. For adolescents, the adjusted relative probability of UCC or RBC versus physician office encounters was 9% higher (RO = 1.09, 95% confidence interval [CI] = 1.08–1.10) and 31% higher (RO = 1.31, 95% CI = 1.29–1.34), respectively, compared with children. For young adults, the adjusted relative probability of a UCC or RBC encounter was 54% (RO = 1.54, 95% CI = 1.52–1.55) and 68% (RO = 1.68, 95% CI = 1.65–1.71) higher, respectively.
Conclusions: Adolescents and young adults were more likely to visit RBCs and UCCs than children. Understanding of UCC and RBC use, cost, and quality of care is needed to inform policies on their roles in health care.

IMPLICATIONS AND CONTRIBUTION

Substantial numbers of insured adolescents and young adults sought care at urgent care clinics and retail-based clinics for common ambulatory conditions and some preventive care. Understanding of urgent care clinics and retail-based clinics use, cost, and quality of care is needed to inform policies on their roles in health care.

Visits to urgent care clinics (UCCs) and retail-based clinics (RBCs) have increased significantly in the last decade and offer alternatives to the physician office for pediatric, adolescent, and young adult ambulatory care [1–6]. UCCs provide walk-in care for illnesses and injuries, typically with evening or weekend hours [2,4,7]. RBCs are usually staffed by nurse practitioners or physicians assistants in high-traffic retail stores, such as pharmacies or supermarkets, and provide protocol-based care for common, uncomplicated illnesses [1,8]. Convenience (e.g., extended and weekend hours and rapid, unscheduled visits) and cost may be drivers for patients choosing to use these sites rather than the traditional physician office [3,9–12].

UCCs and RBCs may offer a unique solution for increasing access to primary care services. However, professional medical societies have mixed policies on the appropriate roles of these care sites. Several societies, including the American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians, and American Medical Association, have expressed concerns about the use of RBCs for primary care. Their concerns include care fragmentation, disruption of the medical home concept, and quality of care [1,13–15]. On the other hand, the American Academy of Pediatrics noted that well-managed UCCs can improve the health of children, integrate into the medical community, and provide adjunctive care but not replace the medical home or emergency department [2].

No studies have described the landscape of ambulatory care and resulting out-of-pocket costs for children, adolescents, and young adults that have included UCCs and RBCs as well as the traditional medical home of physician offices. In addition, distinguishing between youth age groups is important given the unique health care needs of adolescents and young adults compared with younger children [16]. The convenient hours and locations of UCCs and RBCs may be particularly appealing to adolescents and young adults who value expanded hours because of commitments to school or work, are newly-insured under the Affordable Care Act or through employer-sponsored insurance, or may not have established primary care providers [17]. In addition, out-of-pocket cost is an important factor in health care choices, especially as patients and their families experience increased cost-sharing (e.g., higher deductibles, copays and coinsurances) in insurance benefit design [18]. We used claims data from a national cohort of insured children, adolescents, and young adults to describe the use and out-of-pocket costs for UCCs, RBCs, and physician office encounters among insured children (<11 years), adolescents (11–18 years), and young adults (19–30 years). Furthermore, we compared the use of UCCs and RBCs versus physician offices among adolescents and young adult versus children. We hypothesized that the likelihood of UCC and RBC use relative to physician offices is higher for adolescents and young adults than children.

Methods

We analyzed data on ambulatory encounters at UCC, RBC, and physician offices from January to June 2013 from a national administrative data set of privately insured child, adolescent, and young adult beneficiaries.

Data source

Data were from the Clinformatics Data Mart Database (OptumInsight, Eden Prairie, MN), a claims database for privately insured members of a single, large national insurer. More than 12 million beneficiaries in the 2013 Database are similar to benchmarks for the U.S. privately insured population in terms of regional, age, and race/ethnicity coverage [19]. The data included integrated member enrollment and medical claims information. We included in our analysis all claims made at care sites classified as UCC, RBC, or physician offices by patients 30 years old and under at the time of visit from January to June 2013. UCC and RBC care sites were specified within claims data either by place of service (e.g., urgent care facility, walk-in retail health clinic) or provider type (e.g., urgent care specialist or convenient care clinic). Each claim included the date of visit, patient age at visit, up to five diagnoses, a CPT code, and the amounts paid by the patient for the deductible, copay and coinsurance for each encounter.

Outcomes

Encounters were defined as all claims made by a patient on a single day at a single type of care site (UCC, RBC or physician office); the mean number of claims per encounter was 1.9 at UCCs, 1.7 at RBCs, and 2.1 at the physician office. The primary outcome was site of care stratified by age group at the time of the encounter: child (<11 years), adolescent (11–18 years), or young adult (19–30 years). Covariates examined included sex, race, region, primary beneficiary income, and encounter day of week (weekend vs. weekday).

The International Classification of Diseases-9 codes for each claim were categorized using the Agency for Healthcare Research and Quality's clinical classification software of 285 mutually exclusive diagnostic categories [20]. A primary encounter diagnosis was then assigned as the most common primary diagnosis for all associated claims. Diagnoses were classified as acute versus preventive care. The out-of-pocket cost for each encounter was calculated as the sum of the paid amount toward the deductible, copay and coinsurance for all claims in that encounter. CPT codes for office visit level of service (e.g., 99201, 99202) were examined across the sites.

Statistical analysis

Descriptive statistics were used for the primary site outcomes. Encounter was the unit of analysis because we sought to describe the pattern and costs of ambulatory visits at the population level rather than at the individual patient level. Frequency of top encounter diagnoses, presented as the percent of all encounters at that site, was ranked by age group. The percent of encounters accounted for by the top 10 diagnoses were calculated by site.

Mean and median out-of-pocket costs (sum of deductible, copay and coinsurance) were stratified by site of care, age group, and common encounter diagnoses. Comparisons of mean out-of-pocket costs at UCC or RBC versus the physician office were made with a Student t test.

To test whether use of each site was different by age group, multinomial logistic regression was used and adjusted for weekend versus weekday encounter, sex, region, race, and income. Using children and physician office as the reference groups, adjusted relative odds (aROs) with 95% confidence intervals (CIs) are presented for utilization of each site by adolescents and young adults, both overall and for selected common encounter diagnoses. All analyses were conducted using Stata,