California HealthCare Foundation

Overuse of Emergency Departments Among Insured Californians

ISSUE BRIEF

October 2006

Introduction

One of the key challenges facing emergency departments (EDs) nationwide is a marked increase in usage over the last several years. Interestingly, the increase has been shown to be driven primarily by more frequent visits among the insured,[1] often for cases that fail to meet the criteria for emergent or urgent care.[2] Excess use of EDs, particularly for non-urgent care, has been associated with significant increases in health care expenditures.[3] Although the impacts of crowding on quality of care have not been comprehensively studied, evidence suggests that excess use also negatively impacts quality of care.[4]

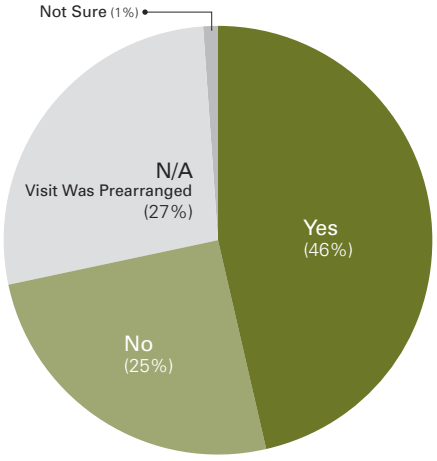
In order to identify factors that trigger ED use among insured consumers and barriers that may prevent them from obtaining care from their regular doctors or other sources, Harris Interactive Inc. surveyed two groups of Californians on behalf of the California HealthCare Foundation. One set of surveys focused on insured consumers; the other focused on primary care physicians (PCPs) and emergency medicine (EM) physicians.

Summarizing the results from these two sets of surveys, this report offers an overview of ED use in California and examines key drivers of increased use. In addition, this report provides specific analyses of sub-groups of insured consumers who are especially prone to ED use: chronically ill adults and consumers covered by Medi-Cal health insurance. Finally, it offers a brief discussion of possible strategies to reduce non-urgent visits.

Summary of Findings

In line with previous findings,[5] survey results indicate that a substantial proportion of all ED visits occurring in the past year were avoidable (see Figure 1). Recent users reported a high number of visits that the users themselves believed could have been prevented. EM physicians also indicated that a substantial proportion of patients sought care that could have been provided by a PCP if one were available, rather than the ED.

Figure 1. Recent ED Users' Responses to Whether their Problem Could Have Been Handled by a PCP



Note: For statistical significance, sample size, and other details please refer to the complete survey findings at www.chcf.org.

The survey responses indicated four key factors in driving avoidable users to emergency departments: lack of **access** to medical care outside the ED, lack of **advice** from physicians on how to handle sudden medical conditions, lack of **alternatives** to the ED, and positive **attitudes** toward EDs.

Possible strategies for reducing excess use of EDs center on improving access to care from PCPs, urgent care centers, nurse advice lines, and other sources of regular care. Access-oriented approaches focus on expanding hours into evenings and weekends, and accommodating walk-in patients. Other approaches focus on improving processes in order to handle patients more efficiently.

General Trends in California ED Use

Almost two in three California residents (65 percent) have used an emergency department at least once in their lifetime, and 15 percent of California residents have visited at least once in the past year. (Nationally, the Centers for Disease Control report that 20 percent of adults have visited an ED at least once in the past 12 months.)

A very small proportion of Californians (2 percent) have been to the ED three or more times in the past year; yet their combined visits constitute 35 percent of all California ED visits during the year. These recurrent users are more likely to be African-American, to have lower incomes, and to be in poor health or to have a chronic health condition, in comparison with non-recurrent users (those who visited once or twice in the past year).

Key Drivers of Increased ED Use

The following subsections examine key drivers of increased use as reported by the general population of California adults, recent adult users, and the subset of recent adult users whose visits were avoidable ("avoidable ED users").

Lack of Access

One of the key drivers of ED use is lack of access to routine and immediate medical care. Forty-six percent of recent users reported a belief that their problem could have been handled by a PCP had one been available. Of those who thought that their problem could have been handled by a PCP, two in three said they would have gone to a PCP instead of the emergency department had an appointment been available. When asked to describe their reasons for seeking care at an ED, recent users most frequently mentioned perceived convenience, health problems occurring outside of business hours, and levels of access to diagnostic testing. Compared to all recent ED users, avoidable users were even more likely to cite access issues and cost as factors in the decision to go to the emergency room.

Compared to the general population of California adults, recent ED users were less likely to have a primary care doctor, much more likely to report that the ED is their usual source of medical care, and more likely to report difficulty in accessing regular or preventive care. Access difficulties include being unable to get a same-day or next-day appointment with a doctor when they are sick or need medical attention or an appointment outside of work hours or on weekends. On many of these dimensions of access, avoidable ED users reported even greater problems than recent users. (see Table 1).

Both primary care and emergency medicine physicians indicated that lack of access to a primary care physician is the number one reason that patients go to the ED, either because health problems occur outside of business hours or because patients cannot get timely appointments with their doctors. EM doctors emphasized that lack of access to same-day appointments is a key reason driving PCP referrals of non-urgent cases. Two in five PCPs do not have time set aside each day for walk-in appointments. The top two reasons identified by EM physicians for non-urgent ED use were long waiting times for appointments (due in part to the limited availability of same-day appointments) and limited access to doctors outside of business hours. In fact, few PCPs offer office appointments after hours (21 percent offer appointments after 6 p.m.) or on weekends (31 percent offer appointments on Saturdays; 14 percent on Sundays).

Since nearly half of ED users indicated they believed their medical problem could have been handled by a PCP or other provider, and roughly two-thirds of these patients reported making unsuccessful attempts to obtain this care outside the emergency room, the survey results indicate

Table 1. Access-Related Differences Among Californians, Recent ED Users, and Avoidable ED Users

ACCESS-RELATED FACTORS	CALIFORNIANS	RECENT ED USERS	AVOIDABLE ED USERS
Extremely difficult or impossible to access routine care without going to the ER	5%	13%	15%
Hospital ED is the usual place they go for medical care	5%	15%	16%
Doctor's office is the usual place they go for care	64%	49%	41%
Have been seeing the same doctor/going to the same place for their health care for 5 years or more	49%	46%	42%
AMONG THOSE WHO HAVE A REGULAR MD/PLACE			
Have been seeing the same doctor/going to the same place for their health care for 5 years or more	49%	46%	42%
MD has office hours on the weekend	28%	21%	18%
MD has office hours before/after hours on weekdays	51%	44%	40%
Would have gone to a PCP instead of the ED if they could have gotten an appointment within 1 to 3 days	—	29%	39%

Note: For statistical significance, sample size, and other details please refer to the complete survey findings at www.chcf.org.

that improving access and removing barriers to obtaining medical care from PCPs will reduce visits to EDs. Studies of use by Medicaid patients suggest successful strategies to improve access may include offering primary care evening hours and offering respiratory equipment in primary care practices, since a high proportion of ED visits by Medicaid patients were found to be related to respiratory conditions.[6]

Lack of Advice: Communication Breakdown

In addition to the lack of access to routine and preventive care, there are notable disparities between patient and doctor perceptions on physicians' availability to give instruction and encouragement and to provide immediate care at PCP offices. While 35 percent of all Californians said that their doctor encourages them to contact him or her prior to going to the ED, 76 percent of doctors said that they provide such encouragement (see Table 2). Most PCPs said they are able to accommodate all or almost all patients who request a same-day appointment. However, half of Californians reported being unable to get a same-day appointment the last time they were sick or needed immediate care.

Avoidable ED users are the most likely to report these breakdowns in communication. Compared to all Californians, fewer avoidable users report having been told by a doctor what to do in case of an immediate health need after hours or on weekends, or to have received encouragement from their doctor to call their doctor's office prior to going to the ED.

To close the communication gap, more research should be conducted to determine exactly why perceptions of patients and doctors differ so significantly regarding doctor/patient communication. Finding solutions to improve communication between doctors and patients will depend on the reasons why these communications are failing. For example, are doctors providing unclear instructions to patients regarding what to do in certain medical situations? Does distress when experiencing a medical problem cause patients to forget their doctor's instructions? Pinpointing the source of miscommunications should help improve communications between doctors and patients. Further, if care options that do not involve using EDs are more successfully communicated to patients, these improvements in communications may ultimately result in reducing ED use.

Table 2. Advice-Related Differences Among Californians, Recent ED Users, and Avoidable ED Users

ADVICE-RELATED FACTORS	CALIFORNIANS	RECENT ED USERS	AVOIDABLE ED USERS
Difficult or impossible to speak to a MD after hours	51%	54%	57%
MD encourages them to contact him/her before going to the ED	35%	33%	29%
Have been told by their regular MD what they should do if they need medical care after hours or on the weekend	60%	61%	48%
Somewhat/not likely to call their MD before going to the ED during business hours	24%	28%	30%
Somewhat/not likely to call their MD before going to the ED outside of business hours	54%	56%	60%
Expect to hear a recorded message telling them to go to the ED when they call their MD	60%	70%	72%
Have access to a nurse advice line	53%	48%	43%

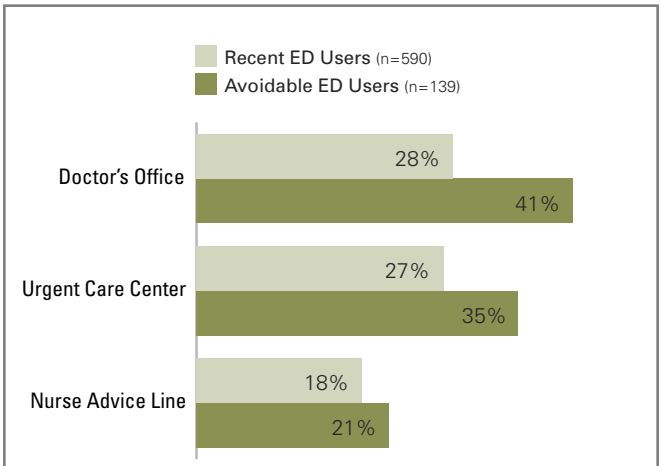
Note: For statistical significance, sample size, and other details please refer to the complete survey findings report at www.chcf.org.

Lack of Alternatives to the ED

A small proportion of users reported considering other options such as PCPs, urgent care centers, or nurse advice lines prior to going to the ED (see Figure 2). Compared to all ED users, those whose visits were avoidable more often reported considering alternatives and trying to get through to their doctor. However, most reported being unsuccessful in reaching their doctor.

Patients' perceptions regarding alternatives to the emergency room overlap with the issues of communication and access. Patients' knowledge of alternatives depends in part on communication with their primary physicians. When communication is flawed, knowledge of alternatives suffers. And the question of whether alternatives can be used effectively is directly related to whether these are alternatives are, in fact, accessible. Other studies have observed that roughly one quarter of primary care practices had no weekday hours after 5 p.m.; more than half lacked weekend hours; and nearly one quarter were unable to accommodate simulated patients asking for appointments for urgent problems.[7] These access barriers suggest that perceptions of lack of alternatives to the ED are at least in part accurate.

Figure 2. Alternative Options Considered by Recent ED Users vs. Avoidable ED Users Prior to Going to the ED



Note: For statistical significance, sample size, and other details please refer to the complete survey findings at www.chcf.org.

Positive Attitudes Towards the ED

Positive attitudes towards the ED appear to be associated with increased use. Recent users report more "pro-ED" attitudes overall than those who did not use ED services in the last year. ED users are more likely than all Californians to associate the emergency room with easy access to diagnostic testing, higher quality of care, easier access to specialists, convenience, and affordability. In addition, users are more likely to consider the ED the place they would turn to first for care and a place they would trust most for the best possible care. Those who used the ED in the last 12 months are also more likely

than other Californians to rate the general quality of care provided in hospital EDs as excellent or very good (see Figure 3).

Convenience plays a big part in users' perceptions of EDs. For a majority of users, convenience was reported as a major factor in the decision to go to the emergency room, since they are open 24 hours a day, 7 days a week. Half of EM doctors rank the relative convenience of the ED among the top three reasons patients use the ED for care that could be handled by their PCP.

Interestingly, many of the positive perceptions reported by recent users are at odds with other evaluations of EDs. Despite users' belief that EDs provide relatively higher quality of care, evidence suggests that overcrowding and overstretched resources negatively impact the quality of care.[8] While recent users report access to specialists as an incentive to visit the ED, three quarters of hospitals report difficulty finding specialists to take emergency and trauma calls.[9] Even convenience may be a misperception. Overcrowding forces many ED patients to wait for extended periods of time to see a physician.[10]

Chronic Illness Among Recent ED Users

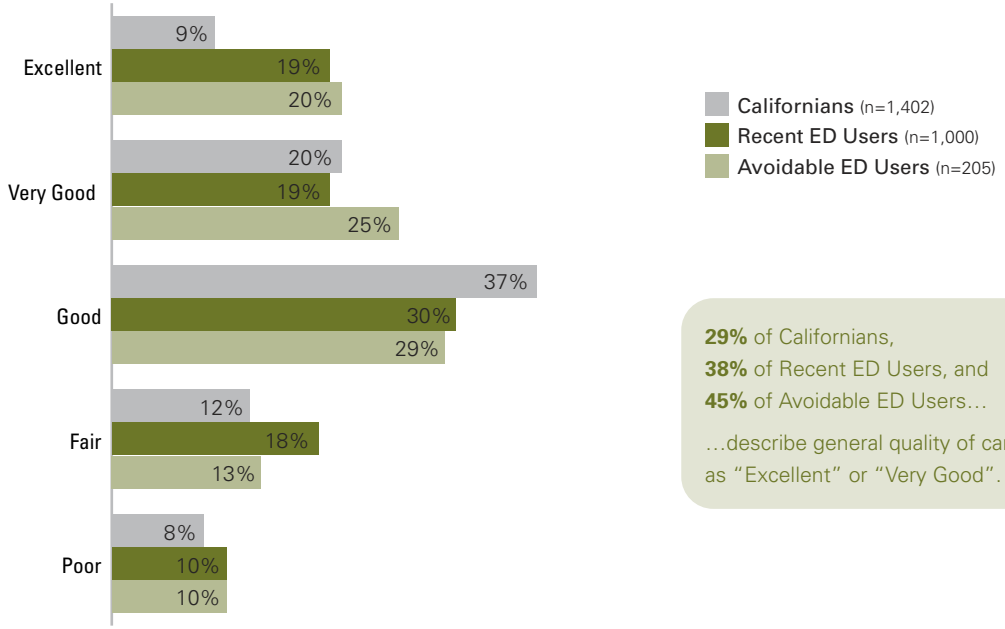
Adults with chronic conditions are disproportionately represented among recent users. While 32 percent of the California adult population suffers from one of four chronic illnesses—hypertension, heart disease, diabetes, chronic lung problems (asthma, emphysema, etc.)—44 percent of recent ED users suffer from these illnesses. Among all Californians, those diagnosed with a chronic illness are more likely than the non-chronically ill to have used the ED at least once in their lifetime, and are somewhat more likely to have used one in the past 12 months (see Table 3).

Table 3. ED Use Among the Chronically Ill vs. Non-Chronically Ill

ED USE	CHRONIC ILLNESS	NO CHRONIC ILLNESS
Lifetime	77%	57%
Past 12 months	21%	13%
3 or more times in past 12 months	4%	1%
AMONG RECENT ED USERS		
Avoidable ER use	23%	19%

Note: For statistical significance, sample size, and other details please refer to the complete survey findings at www.chcf.org.

Figure 3. Quality Rating of ED Care in General Among Californians, Recent ED Users, and Avoidable ED Users



Note: For statistical significance, sample size, and other details please refer to the complete survey findings at www.chcf.org.

While chronic disease patients have greater needs for care, mechanisms do not appear to be in place to accommodate these needs during non-business hours. For example, 34 percent of chronically ill recent ED users say their doctor encourages them to contact him/her before going to the emergency room, but 55 percent report it is extremely difficult, somewhat difficult, or impossible to speak to a doctor outside of business hours. These results are similar to those for non-chronically ill recent users, and suggest that there may be opportunities to improve access to medical advice or services for chronically ill patients.

About one-third of chronically ill patients indicated that their visits to the ED were related to their chronic condition. Visits among the chronically ill are disproportionately related to needs for medication and to experiencing previously unfamiliar symptoms. ED visits among chronically ill users are also more likely to lead to obtaining prescriptions and diagnostic tests (see Table 4).

Table 4. Reasons for Visiting the ED and Outcomes of the Visit, Chronically Ill vs. Non-Chronically Ill

	RECENT ED USERS	
REASON FOR GOING	CHRONIC ILLNESS	NO CHRONIC ILLNESS
Suffered an accident	23%	36%
Needed prescription or medication	55%	46%
Experienced symptoms related to a chronic condition	36%	11%
Experienced symptoms for an unknown condition	58%	43%
OUTCOME OF VISIT		
Prescribed medication	74%	64%
Received diagnostic testing	71%	55%
Seen by a specialist	46%	49%
Admitted overnight to the hospital	30%	24%

Note: For statistical significance, sample size, and other details please refer to the complete survey findings at www.chcf.org.

The pattern of greater use among the chronically ill raises concerns about the continuity and quality of care these patients receive and underscores the need for better ongoing management of their conditions, including monitoring of medications. The predictability of these patients' needs—prescription renewals are a good example—should mitigate somewhat the challenge of developing mechanisms to provide necessary care for them outside EDs.

Recent ED Users Covered by Medi-Cal Health Insurance

Medi-Cal recipients are more than twice as likely as the privately insured to have used the ED in the past 12 months; 31 percent of Medi-Cal members have used one in the past year versus 15 percent of the general adult population. The survey results show that greater use among Medi-Cal recipients is primarily driven by a compounding of the four key drivers of ED use: lack of access, lack of advice, lack of alternatives, and more positive attitudes towards the emergency department.

With regard to access, Medi-Cal patients are less likely to have a regular doctor and more likely to use a clinic or ED for their health care. They reported more difficulty in accessing routine and preventive care outside of the ED, are more likely to go to the ED during a weekday, and are less likely to call their doctor prior to going to the ED (see Table 5).

Medi-Cal patients are more likely to cite cost (they may view the emergency room as a *less* expensive option) and the need for prescription medication as reasons for going to the ED (see Table 6). Compared to privately insured recent users, Medi-Cal patients are more likely to believe that the ED provides a higher quality of care and are more likely to report that the emergency department is the first place they would turn with a medical problem, as well as the place they trust most to give them the best possible care. However, they are less likely than the privately insured to rate their last experience as excellent or very good.

The increased difficulties reported by Medi-Cal recipients in obtaining regular care outside the ED raise the question of what additional barriers to care exist for these patients compared to the privately insured. Similarly, the fact that Medi-Cal recipients are even more likely than the privately insured to view the ED positively raises questions about their perceptions of regular care; specifically, whether Medi-Cal recipients perceive their regular care to be of poorer quality than do the privately insured.

Table 5. Access-Related Differences Among Recent ED Users, Privately Insured vs. Medi-Cal Recipients

	RECENT ED USERS	
ACCESS-RELATED FACTORS	PRIVATELY INSURED	MEDI-CAL RECIPIENTS
Somewhat/extremely difficult or impossible to access routine care without going to the ED	21%	42%
Would have gone to a PCP instead of an ED if they could have gotten an appointment within 24 hours	52%	43%
Hospital ED is the usual place they go for care or they do not have a regular source of care or are not sure	12%	19%
Doctor's office is the usual place they go for care	69%	37%
Could get an appointment on the same or next day the last time they were sick or needed medical attention	66%	42%
Extremely/somewhat difficult to speak to a MD outside of business hours or they are unable to speak to a MD outside of business hours	49%	66%

Note: For statistical significance, sample size, and other details please refer to the complete survey findings at www.chcf.org.

Table 6. Ratings of the ED by Recent ED Users, Privately Insured vs. Medi-Cal Recipients

	RECENT ED USERS	
MAJOR FACTOR IN DECISION TO GO TO ED	PRIVATELY INSURED	MEDI-CAL RECIPIENTS
BASE INCLUDES RECENT ED USERS WHO MADE THE DECISION TO GO TO THE ED		
More convenient than doctor's office	63%	71%
Symptoms occurred after office hours or on weekend	51%	56%
Expected easier access to diagnostic testing	44%	57%
Could not get timely appointment	41%	49%
Expected easier access to specialists	38%	59%
Encouraged by family/friends	37%	49%
Do not have regular doctor	19%	32%
Didn't want to miss a day at work	12%	23%
Thought other places would be more expensive	7%	24%
BASE INCLUDES ALL RECENT ED USERS		
Need for medication or a prescription was a reason in their going to the ED	44%	57%

Note: For statistical significance, sample size, and other details please refer to the complete survey findings at www.chcf.org.

Strategies to Reduce Non-Urgent Visits to the ED

Given the negative effects of excess use, there is a compelling need to develop strategies for reducing non-urgent visits. Most strategies being considered focus on improving access to care via methods such as extending hours at various non-ED facilities, providing alternative facilities, providing financial incentives for physicians, limiting malpractice liability for physicians, and making nurse advice lines more available, among others. Specific ideas generated from prior research include:

- Expanding the network of community health care centers by broadening eligibility criteria for section 330 grant funding.[11]
- Making specialized respiratory equipment available at primary care practices.[12]
- Improving chronic disease management.[13]

Not all strategies focus on improving access to regular care; others include managing non-urgent ED cases more efficiently, creating financial penalties for choosing ED care, and providing community education about appropriate use of EDs. Specific approaches include:

- Creating "fast track" systems that identify patients with urgent conditions that can be treated relatively quickly and process these patients in accordance with a specific fast-track process. For example, a physician might treat a fast-track patient while waiting for test results for a more critically ill patient.[14]
- Improving availability of on-call specialists in EDs.[15]

When asked to indicate which strategies to reduce non-urgent emergency room use would be "extremely effective," PCPs are slightly more optimistic overall than are EM physicians. Increasing the availability and expanding the hours of urgent care clinics was the most popular approach among PCPs, with 31 percent ranking that method as extremely effective. "Fast-track" systems were the favored approach among EM physicians, with 24 percent of respondents indicating this approach would be extremely effective. A similar percentage of EM physicians

Table 7. PCP and EM Ratings of Various Strategies to Reduce Non-Urgent ED Use

How effective do you think each of the following practices would be in reducing the number of patients in the ED whose medical problems could be treated in a doctor's office or urgent care center?	% EXTREMELY EFFECTIVE	
	PCP	EM
Increased availability of alternative facilities such as urgent care or walk-in centers	31%	19%
Longer hours and weekend hours offered at urgent care centers	30%	20%
Expanded availability of primary care doctor offices before or after normal business hours or on weekends	24%	21%
Improved financial incentives for PCPs to see patients in their offices rather than the ED	22%	18%
Improved financial incentives for PCPs to see patients after hours or on weekends	21%	22%
"Fast-track" arrangements on site at the hospital/connected to the ED	21%	24%
Increased community education about urgent care centers	21%	16%
Protection for physicians against potential malpractice lawsuits	20%	15%
Better triaging of non-urgent cases when patients arrive at the ED	18%	8%
Greater availability of nurse advice lines for patients to call to get immediate health advice	17%	6%
Increased costs to patients for going to the ED (e.g., higher co-pays)	17%	18%
Increased community education about the appropriate use of the ED	12%	4%
Written information given to patients by their primary care providers about what to do if they get sick and need to reach a doctor	12%	5%
Require patients to get pre-authorization for an ED visit from their health plan	6%	6%

Note: For statistical significance, sample size, and other details please refer to the complete survey findings at www.chcf.org.

indicated that improving availability of PCP offices would be extremely effective (see Table 7). It is noteworthy that none of the strategies were considered extremely effective by a majority of those surveyed.

Most EM physicians (56 percent) indicated that their hospitals have made some efforts to address non-urgent ED use. However, two in five found these efforts either somewhat or not at all effective. Overall, PCPs are more supportive than EM physicians of efforts to keep patients out of the ED whose health problems could have been treated in another setting.

Conclusion

As EDs become more crowded and avoidable visits continue to increase, the need to find solutions to excess use is becoming more urgent. Surveying recent users of emergency departments is helpful in understanding the factors driving patients to emergency rooms. Patients' descriptions of their reasons for seeking care at an ED after other options have revealed flaws in the health care system, particularly in access to care and alternatives to emergency services.

Policy-makers need to consider how ED use is interrelated with other facets of the health care system, including access to primary care physicians and urgent care clinics. A substantial portion of use might be avoided if barriers to care are removed. For example, if PCPs accommodated patients with same-day or after-hours appointments, many of those patients could be kept out of the ED. Similarly, if more alternatives were available such as urgent care or community health centers, the burden on emergency rooms would likely be eased. Other promising approaches include improving the efficiency of ED services, particularly with regard to non-urgent patients. Communication problems between doctors and patients need to be addressed, and patients should be educated about appropriate use of EDs.

As disproportionately high users of EDs, Medi-Cal recipients and chronically ill patients present special issues that need to be addressed in order to reduce these groups' use. Reducing Medi-Cal recipients' dependence on EDs would be likely to improve care provided to these patients and considerably reduce costs to the system. Similarly, improving access to primary care for chronically ill patients and developing mechanisms to manage their chronic conditions would raise the quality of care for these vulnerable consumers while also reducing the burden they place on EDs.

Methodology

A total of 1,402 phone interviews were conducted with adults in California. The 1,402 adults included both a general cross-section of (N = 502) and an over-sample of individuals who have used an ED in the past 12 months (for a total of 1,000 "recent ED users"). Interviews were conducted between February 23 and March 19, 2006. The average interview length was 25 minutes. Final data were weighted by age, education, gender, race/ethnicity, income, insurance status, household size, and number of phone lines based on current population survey data to represent the population of adults (18 or older) in California. Further, a post weight for recent use of the ED was applied to bring over-sampled data in-line with the California population.

Based upon the data collected from recent ED users, a subset of users was defined comprised of users reporting visits to the ED that were avoidable. Avoidable visits are defined as those occurring during business hours for a problem the patient believed could have been treated by a primary care physician, and/or visits for which the patient said they could have waited longer than 24 hours for care. The users that reported such visits are termed "avoidable users" in this report.

The physician survey was conducted by mail with 107 emergency medicine (EM) and 400 primary care physicians (PCP), such as family, general practice, and internal medicine, from March to June 2006. The survey was conducted by mail. The response rate for physicians was 43 percent. All samples were drawn from the current AMA master file of all medical doctors practicing in California. Only physicians who spend at least 20 hours per week on direct patient care were included. Data were weighted by gender and years in practice to represent the state-wide population of physicians in the selected specialties in direct patient care.

ENDNOTES

1. Cunningham, P. and J. May. "Insured Americans Drive Surge in Emergency Department Visits." Center for Studying Health System Change, October 2003 (www.hschange.org).
2. Liu, T., M. R. Sayre, and S. C. Carleton. "Emergency Medical Care: Types, Trends and Factors Related to Non-urgent Visits." *Academic Emergency Medicine,* 1999.
3. Baker, L. C. and L. S. Baker. "Excess Cost Of Emergency Department Visits For Nonurgent Care." *Health Affairs;* Winter, 1994.
4. Taylor, J. "Don't Bring Me Your Tired, Your Poor: The Crowded State of America's Emergency Departments." National Health Policy Forum Issue Brief No. 811; July 7, 2006.
5. Liu, et al. 1999.
6. Lowe, R. "How Primary Care Practice Affects Medicaid Patients' Use of Emergency Services." Leonard Davis, Institute of Health Economics Issue Brief, Vol. 10, No. 8; Summer 2005.
7. Lowe, 2005.
8. Taylor, 2006.
9. Institute of Medicine of the National Academies, Fact Sheet. "The Future of Emergency Care: Key Findings and Recommendations." June 2006.
10. Taylor, 2006.
11. Ibid.
12. Lowe, 2005.
13. Taylor, 2006.
14. Ibid.
15. Ibid.

FOR MORE INFORMATION CONTACT

California HealthCare Foundation
476 Ninth Street
Oakland, CA 94607
tel: 510.238.1040
fax: 510.238.1388
www.chcf.org