

Serving the Homeless Could Save Taxpayer Dollars

Can information about the behavior patterns of the homeless help the city better serve these individuals and save tax dollars at the same time? In spring 2006, a research team at the Indiana University Center for Health Policy set out to answer this question. We conducted a study to identify chronically homeless individuals who frequently use public services and to estimate the costs associated with their care.

The U.S. Department of Housing and Urban Development defines a chronically homeless individual as “an unaccompanied disabled individual who has been continuously homeless for over one year OR who has had at least four episodes of homelessness in the past three years” (U.S. Department of Housing and Urban Development, 2006). Although the people in this category make up only a small proportion (about 10 to 15 percent) of the more than 750,000 homeless people in the United States, they are responsible for a large portion of the expenses incurred by the homeless because of their frequent use of public social services, including law enforcement, jails, drug clinics, psychiatric facilities, and hospital emergency rooms (Green, 2006).

With one of the largest homeless populations in the state, according to the 2007 Biannual Count of the Homeless, Indianapolis has an estimated 2,100 homeless individuals at any one time. Thus, it is useful to identify the major cost-drivers of this group and determine where resources are allocated to effectively tailor services for this population and ultimately reduce the costs associated with their care.

Study Methods

Our research team identified 96 chronically homeless individuals who were “intensive users” of public services. Of these, 95 percent were male and the average age was 45. Approximately 55 percent were black, 39 percent white, and 6 percent other races.

Each study participant was asked to sign an informed consent form and HIPAA authorization. These consents granted

permission for our team to collect information about the participants’ access to public social services, use of public health services, and involvement in the criminal justice system (including police contacts and corrections and incarceration information). Data on the use of these services by each individual were obtained for a 3.5-year period from January 2003 through June 2006.

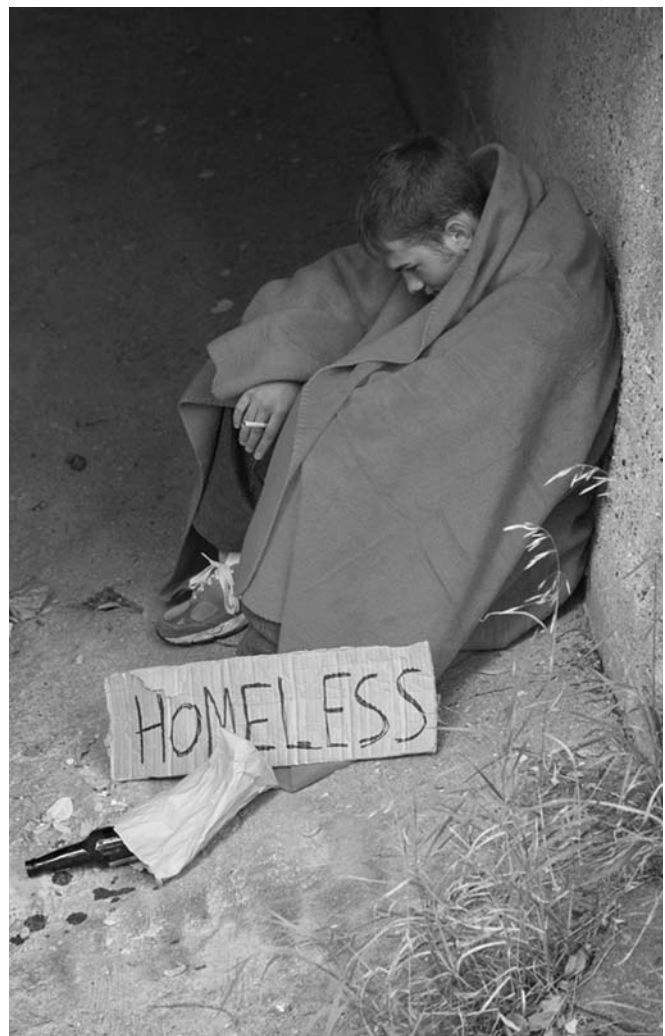


Table 1a. Number of Healthcare Visits per Quarter by Study Participants (n = 96)

Quarter	Number of patients	Total outpatient visits	Total inpatient visits	Total visits (total outpatient + total inpatient)	Average quarterly visits per patient
2003 Q1	35	441	1	442	13
Q2	34	496	1	497	15
Q3	37	408	2	410	11
Q4	30	366	0	366	12
2004 Q1	29	284	3	287	10
Q2	34	273	3	276	8
Q3	40	375	1	376	9
Q4	38	411	1	415	11
2005 Q1	42	385	6	391	9
Q2	43	442	3	445	10
Q3	44	654	2	656	15
Q4	43	442	4	446	11
2006 Q1	47	918	5	923	20
Q2	47	1,053	6	1,059	23
TOTAL		6,948	38	6,986	
Average overall per person visits of those who accessed services in any one quarter					13
		Mean	Standard Deviation		
Average number of visits per person (total visits/96)		73	219		
Average visits per quarter (total visits/14)		499	229		
Visits per person per quarter (total visits/96/14)		5	3		

Health Service Usage and Costs

Tables 1a and 1b summarize the number of visits and charges for both outpatient (Wishard Emergency Department and Midtown Community Mental Health Center) and inpatient (Wishard Hospital) visits of those people who had a visit during the study time period (89 people, or 93 percent of the study participants). As Table 1a shows, the average number of visits per person over the 14-quarter (3 months per quarter) time period was 73. The average number of visits per quarter for all 96 individuals (5 visits) is less than half the average number of visits of those who used the services at least once in any given quarter (13 visits), indicating an uneven distribution of visits. The tables also reveal a direct relationship between the number of outpatient and inpatient visits—both steadily increased over the study period.

We found a similar pattern for charges for health services used. The average charges for health services per participant over the 3.5 years was \$11,772 (see Table 1b). The average quarterly

Table 1b. Charges for Healthcare Visits by Study Participants per Quarter (n = 96)

Quarter	Total outpatient charges	Total inpatient charges	Total combined charges (total outpatient + total inpatient)	Average quarterly charges per person
2003 Q1	\$61,267	\$10,024	\$71,291	\$2,037
Q2	\$71,283	\$30,767	\$102,050	\$3,001
Q3	\$65,528	\$8,327	\$73,855	\$1,996
Q4	\$47,015	\$19,452	\$66,467	\$2,216
2004 Q1	\$61,838	\$17,923	\$79,761	\$2,750
Q2	\$38,418	\$31,292	\$69,710	\$2,050
Q3	\$39,607	\$6,628	\$46,235	\$1,156
Q4	\$37,512	\$10,253	\$47,765	\$1,257
2005 Q1	\$34,588	\$29,503	\$64,091	\$1,526
Q2	\$28,606	\$50,952	\$79,558	\$1,850
Q3	\$32,310	\$21,511	\$53,821	\$1,223
Q4	\$26,233	\$60,920	\$87,153	\$2,027
2006 Q1	\$43,970	\$46,791	\$90,761	\$1,931
Q2	\$54,542	\$143,062	\$197,604	\$4,204
TOTAL	\$642,717	\$487,405	\$1,130,122	
Average per person charges per quarter of those who accessed services				\$2,087
		Mean	Standard Deviation	
Average charges per person over time period (total visits/96)		\$11,772	\$25,891	
Average charges per quarter (total charges/14)		\$80,723	\$37,207	
Charges per person per quarter (total visits/96/14)		\$841	\$388	

charges over the entire time period was \$841 per person for all 96 homeless in the study group, compared with \$2,087 per person per quarter for those who used services at least once in any given quarter. Over the 3.5 year study, the city provided \$1,130,122 in health care services to the 96 people in the study.

Table 2: Analysis of Visits and Charges (n = 96)

Primary diagnosis	Visits	Percent of total visits	Charges	Percent of total healthcare charges
Emergency room visits (for reasons other than substance abuse/mental illness)	519	7%	\$70,603	6%
ER visits for substance abuse/mental illness	181	3%	\$20,964	2%
Substance abuse/mental illness visits—outpatient	5,026	72%	\$396,278	35%
Substance abuse/mental illness visits—inpatient	27	0.4%	\$355,003	31%
All other visits	1,236	18%	\$287,274	25%

In addition to the number and cost of medical visits, we examined the primary diagnosis for inpatient and outpatient healthcare visits. Table 2 shows the number of visits for which the primary treatment diagnosis was either substance abuse or mental illness. Three-quarters (75 percent) of the participants had at least one visit for substance abuse and/or mental illness. However, we cannot assume that the remaining 25 percent did not have some type of substance abuse problem and/or mental illness as only the primary diagnosis (for example, a broken leg) was recorded. Substance abuse or mental illness may have been secondary diagnoses. Also, as Table 2 illustrates, inpatient costs for mental illness account for less than 1 percent of the visits but 31 percent of the charges.

Criminal Justice Usage and Costs

Tables 3a and 3b summarize the total number of encounters with the criminal justice system per quarter (data from the Indianapolis Arrestee Processing Center and Indiana Department of Corrections) and resulting charges incurred by individuals during the study time

period. As Table 3a shows, our analysis found an average of five criminal justice encounters per quarter for each person in the study. During the study period, 54 people (56 percent of the participants) had an encounter (an arrest and/or time in jail). However, not all had encounters with the law during any given quarter. The average number of encounters per quarter for individuals who had at least one encounter with the criminal justice system during that quarter is 21. Similar to the results obtained for usage of public health services, encounters are not evenly distributed across the population. We found that the number of criminal justice encounters increased over 1,100 percent, from a low of 80 encounters in the first year of the study to a high of 979 in the final quarter.

As Table 3b shows, if total charges are divided by the total study population, criminal justice encounters have an estimated average quarterly cost of \$446 per person. The average total cost per person among individuals who had at least one encounter was \$2,077. In total, the cumulative financial cost for these criminal justice encounters was \$599,525.

Table 3a: Number of Encounters with the Criminal Justice System by Study Participants, per Quarter (n = 96)

Quarter	Number of arrestees	Total arrests	Total number of jail days	Total encounters	Average encounters per arrestee	
2003 Q1	14	24	56	80	6	
Q2	18	28	245	273	15	
Q3	17	26	234	260	15	
Q4	16	15	206	221	14	
2004 Q1	16	12	277	289	18	
Q2	21	29	331	360	17	
Q3	22	26	343	369	17	
Q4	19	25	438	463	24	
2005 Q1	21	24	366	390	19	
Q2	20	30	379	409	20	
Q3	24	31	549	580	24	
Q4	19	16	748	764	40	
2006 Q1	27	26	729	755	28	
Q2	27	38	941	979	36	
TOTAL		350	5,842	6,192		
Average number of encounters of those who had an encounter per quarter					21	
					Mean	
					Standard Deviation	
Encounters per person (total encounters/96)					65	143
Encounters per quarter (total encounters/14)					442	247
Encounters per person per quarter (total encounters/96/14)					5	2

Table 3b: Criminal Justice Encounters, per Quarter Costs (n = 96)

Quarter	Total arrest costs	Total jail time costs	Total combined costs (total arrest + total jail)	Average costs per person	
2003 Q1	\$18,000	\$3,231	\$21,231	\$1,516	
Q2	\$21,000	\$14,134	\$35,134	\$1,952	
Q3	\$19,500	\$13,499	\$32,999	\$1,941	
Q4	\$11,250	\$11,884	\$23,134	\$1,446	
2004 Q1	\$9,000	\$15,980	\$24,980	\$1,561	
Q2	\$21,750	\$19,095	\$40,845	\$1,945	
Q3	\$19,500	\$19,788	\$39,288	\$1,786	
Q4	\$18,750	\$25,268	\$44,018	\$2,317	
2005 Q1	\$18,000	\$21,115	\$39,115	\$1,863	
Q2	\$22,500	\$21,865	\$44,365	\$2,218	
Q3	\$23,250	\$31,672	\$54,922	\$2,288	
Q4	\$12,000	\$43,152	\$55,152	\$2,903	
2006 Q1	\$19,500	\$42,056	\$61,556	\$2,280	
Q2	\$28,500	\$54,286	\$82,786	\$3,066	
TOTAL	\$262,500	\$337,025	\$599,525		
Average cost for those who had an encounter per person per quarter				\$2,077	
				Mean	
				Standard Deviation	
Average costs per person (total visits/96)				\$6,245	\$11,096
Average costs per quarter (total charges/14)				\$42,823	\$16,660
Costs per person per quarter (total visits/96/14)				\$446	\$182

Combined Health and Criminal Justice Utilization and Expenditures

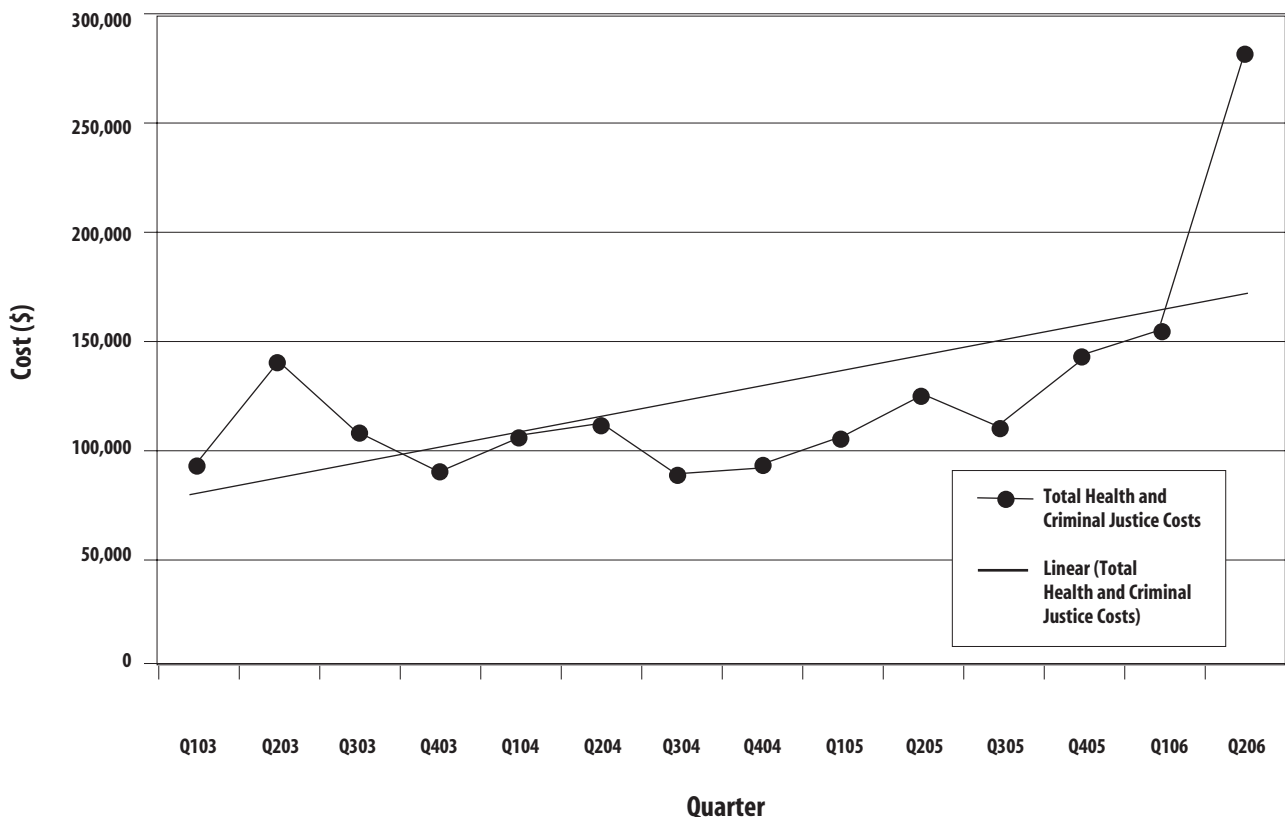
Figure 1 shows the combined total costs for health and criminal justice encounters for the 3.5-year study. Over the study period, the city of Indianapolis and Marion County spent \$1.7 million to care for these people. The linear trend line suggests that the total cost for these services rose over time, with the sharpest increases occurring in the most recent years, reaching \$280,390 in the second quarter of 2006.

Thoughts for Policymakers

We found an overall trend of increasing costs for the use of public services by chronically homeless individuals. Perhaps the most telling aspect of the data is that three-fourths (75 percent) of the most frequent users of health and criminal justice services were diagnosed with a substance abuse problem or mental illness during

the study period. Our findings suggest that each year Marion County and the city of Indianapolis expend between \$5,912 and \$15,560 in the public health care and criminal justice systems to respond to the needs of the average chronically homeless person with mental illness and/or substance abuse problems. This estimate does not include any costs associated with providing food or shelter. According to the 2007 Biennial Count of the Homeless, there are approximately 500 people on the streets of Indianapolis or in the shelters who face mental illness and/or substance use-related challenges. When we extrapolate the average costs estimated above to that population, public health care and criminal justice expenditures for the chronically homeless population in Indianapolis range from \$3 million to \$7.8 million, costs similar to those developed for other metropolitan areas (Culhane et al., 2002).

Figure 1: Total Combined Quarterly Healthcare and Criminal Justice Costs for All Participants (n = 96)



These data raise important questions about whether public dollars are being spent effectively on the care of these individuals, or whether other options might be more cost efficient in responding to the needs of this population. For example, an engagement center that has no sobriety requirement for services could dramatically expand access to homeless individuals who are actively using alcohol or drugs. Such a center would provide an alternative safe shelter to reduce their state of intoxication and risk of arrest for public intoxication, and it would facilitate screening for service needs. This type of program could also be a stepping stone to engaging these individuals in the service system and obtaining permanent housing which would further help to reduce jail time and unnecessary visits to the emergency room.

Other initiatives to help people more quickly access mainstream subsidies such as Social Security Disability and Medicaid would help reduce costs by facilitating more cost effective use of public health services. Determination of disability would lead to a consistent source of income for these individuals, and a determination of Medicaid eligibility would lead to better health care for both mental and physical needs.

Permanent supportive housing for this population and enhanced outreach efforts would move people off the streets and out of emergency shelters more quickly. The Action Coalition to Ensure Stability (ACES) demonstration model/cost study supports the cost effectiveness of a permanent supportive housing approach using a housing first approach. According to several studies (Green, 2006; Culhane et al., 2002), permanent supportive housing improves physical and mental health, which reduces the need for these services, particularly expensive inpatient mental health care and hospitalization. Permanent supportive housing helps tenants increase their incomes, obtain employment, get arrested less often, make more progress toward recovery, and become more active and productive members of their communities. Policymakers could facilitate greater access by reducing the barriers to longer term housing subsidies such as housing choice vouchers (i.e., long waiting lists/lack of “preference;” criminal histories; poor credit). Administrative barriers often restrict access to mainstream programs and decrease the likelihood that homeless people will apply for the programs.



*I*ndianapolis has an estimated 2,100 homeless individuals at any one time.



Overall, the high cost of providing care to chronically homeless people who have a substance abuse problem or mental illness underscores the need to carefully examine how our community is responding to the needs of this population. This study indicates that there is a critical need in Indianapolis for programs that specifically target homeless individuals with mental illness and substance abuse problems. Expanding access to such programs—and coordinating this type of care with existing housing and social services—would help provide better care for this high-need population and reduce the financial stress on our criminal justice and public healthcare systems.

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Indianapolis Homeless Count Shows More than 2,000 Homeless

The U.S. Department of Housing and Urban Development (HUD) plays an important role in homeless aid and prevention. To understand the homeless population throughout the nation, HUD requires communities to participate in biennial homeless counts and annual housing inventories.

The biennial homeless count is a one-night count of the homeless taken on one night (one “point in time”) during the last week of January. On January 25, 2007, the biennial point-in-time count was held in Indianapolis. These counts have traditionally been administered by the Coalition for Homelessness Intervention and Prevention (CHIP) with the help of other local organizations and volunteers. However, this year, the Indiana University Center for Health Policy helped refine the methodology for conducting the survey. Also, the 2007 count relied more heavily on field professionals and less on volunteers.

HUD requires the count to differentiate between sheltered and unsheltered homeless persons and defines them according to the

place where they reside on the night of the count. An *unsheltered homeless person* resides in a place not meant for human habitation, such as a car, park, sidewalk, abandoned building, or on the street. A *sheltered homeless person* resides in an emergency shelter or transitional housing for the homeless.

Under the HUD definition, 2,061 homeless persons were counted in Indianapolis on January 25, 2007. This was slightly less than the 2,080 counted in 2005. Table A shows the actual 2007 count numbers for sheltered and unsheltered homeless. The total number of homeless in Indianapolis appears to be holding steady (see Table B), however, this year’s count shows a large increase in the number of homeless individuals in the street count. This increase in unsheltered homeless could be attributed to improvement of the street count methodology.

Table A: 2007 Homeless Count Results in Indianapolis, Indiana, January 25, 2007

	Sheltered		Unsheltered	Total
	Emergency shelters	Transitional housing		
Number of persons with children*	229	312	0	541
Number of single individuals and persons in households without children	462	631	427	1,520
TOTAL	691	943	427	2,061

*Including children

Table B: Comparison of Last Three Biennial Homeless Counts (2007, 2005, and 2003)*

Place	2007	2005	2003
Emergency shelter	691	740	736
Transitional housing	943	1192	1290
Street count	427	147	204
TOTAL	2,061	2,080	2,230

*Some of the differences in the number of people counted in emergency shelters and transitional housing may reflect a variation in the way that shelter providers classify the services they provide.



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