



## CHA Families and the Plan for Transformation

# The Health Crisis for CHA Families

David J. Price and Susan J. Popkin

The HOPE VI Panel Study research has highlighted that many residents of distressed public housing face severe health challenges. In 2007, we argued that this problem was so serious that it should receive the same policy focus as unemployment (Manjarrez, Popkin, and Guernsey 2007; Popkin, Levy, and Buron 2009).

Because of the well-documented link between physical environment and well-being (see Lindberg et al. forthcoming), the HOPE VI Panel Study included a focus on resident health. At the baseline in 2001, HOPE VI Panel Study respondents from Chicago and the other four study sites were in far worse health than other low-income households, reporting high rates of overall poor health, as well as of asthma and depression (Popkin et al. 2002). The 2003 and 2005 follow-ups showed this problem intensifying over time: in 2005, two out of every five respondents (41 percent) in Madden/Wells and the other four sites rated their health as either “fair” or “poor.” Further, at every age level, respondents were much more likely to describe their health as fair or poor than other adults overall and even than black women, a group with higher-than-average rates of poor health. Not only did respon-

dents report high rates of disease, they were also clearly debilitated by their illnesses: one in four respondents reported having such difficulty with physical mobility that they could not walk three city blocks, climb 10 steps without resting, or stand on their feet for two hours (Manjarrez et al. 2007; Popkin 2010).

The 2009 follow-up of the Chicago Housing Authority (CHA) Panel Study shows that respondents’ well-being has improved in important ways—they now live in housing that is substantially higher-quality and in neighborhoods that are dramatically safer than the Madden/Wells development (Buron and Popkin 2010; Popkin and Price 2010). However, in this brief, we present findings that show that despite these improvements, respondents’ health has continued to deteriorate rapidly; reported health problems in 2009 are stunning, and the mortality rate is shockingly high. In our report on the 2005 follow-up (Manjarrez et al. 2007), we stated that the health situation was “so severe that it calls for urgent attention and new approaches to providing services to this extremely vulnerable population.” Four years later, the urgency has only increased. The need

for strong and effective action is now even more critical.

### Overall Health: Deteriorating over Time

At each wave of the Panel Study, we asked respondents to rate their health on a five-point scale from “excellent” to “poor.” Overall health ratings are important because they are predictive of morbidity (i.e., serious illness) and mortality (Bosworth et al. 1999; Franks, Gold, and Fiscella 2003). As figure 1 shows, despite improvements in respondents’ well-being as a result of moving to safer neighborhoods with better housing (Buron and Popkin 2010), their overall health has continued to deteriorate, indicating that they are at high risk for serious health problems.

- In 2009, Madden/Wells respondents rated their overall health significantly worse than the already-poor ratings in previous years. In 2009, more than half (51 percent) of respondents identified their health as fair or poor, up from 37 percent in 2001.<sup>1</sup> By comparison, just 13 percent of the general population reported fair or poor health; the figure for black women (who tend to be less

healthy than average) is 20 percent.<sup>2</sup> After controlling for such factors as age and gender, a multivariate analysis showed that those who had lived in public housing for at least 10 years in 2001 were most likely to report negative changes in health by 2009.<sup>3</sup> These long-term public housing residents may have already had marginal health in 2001, either because the conditions in public housing caused their poor health or because unhealthy residents were less likely to leave.

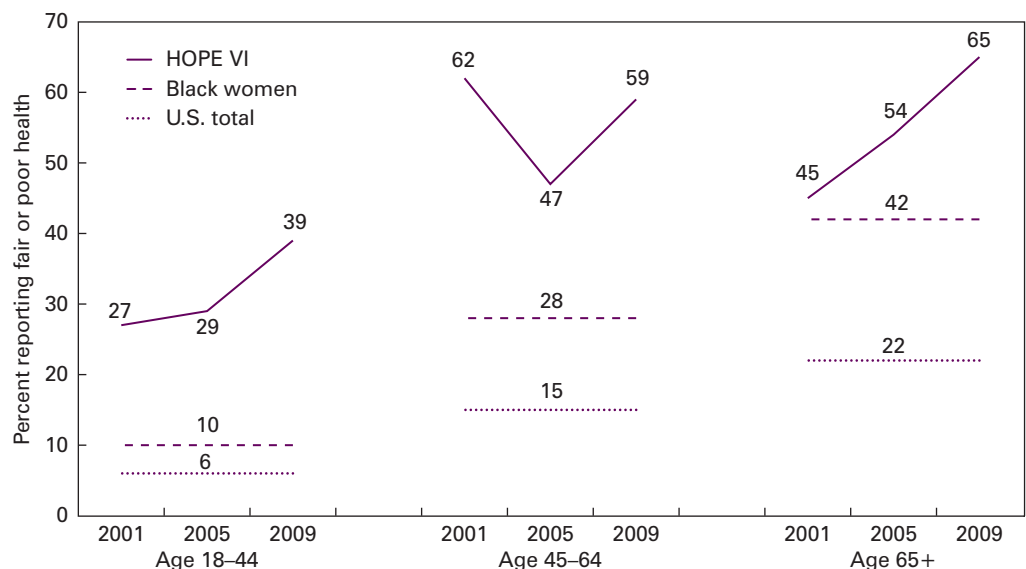
- Figure 1 shows that these stark differences hold even when we account for age. In 2001, Madden/Wells respondents’ health was worse than the general population’s, and has been steadily deteriorating since. In fact, respondents age 18 to 44 now rate their health as fair or poor more than six times as often as the national average for their own age group, and almost twice as often as the national average for people over 65.

### Chronic Illness and Disability

Madden/Wells respondents’ overall health ratings indicate high risk for serious medical conditions. In 2009, as in the previous follow-ups, we asked respondents whether they had been diagnosed with a range of

*“Respondents 18 to 44 rate their health as fair or poor more than six times as often as the national average for their age group, and almost twice as often as people over 65.”*

FIGURE 1. Self-Reported Health Status of HOPE VI Respondents



Sources: 2001, 2005, and 2009 Chicago Panel Study Sample and 2005 National Health Interview Survey.

specific ailments. Again, residents' reports indicate a population in distress, with extraordinarily high rates of chronic, debilitating illness. The only positive change since 2005 is a reduction in anxiety and worry, which may reflect respondents' improved living circumstances.

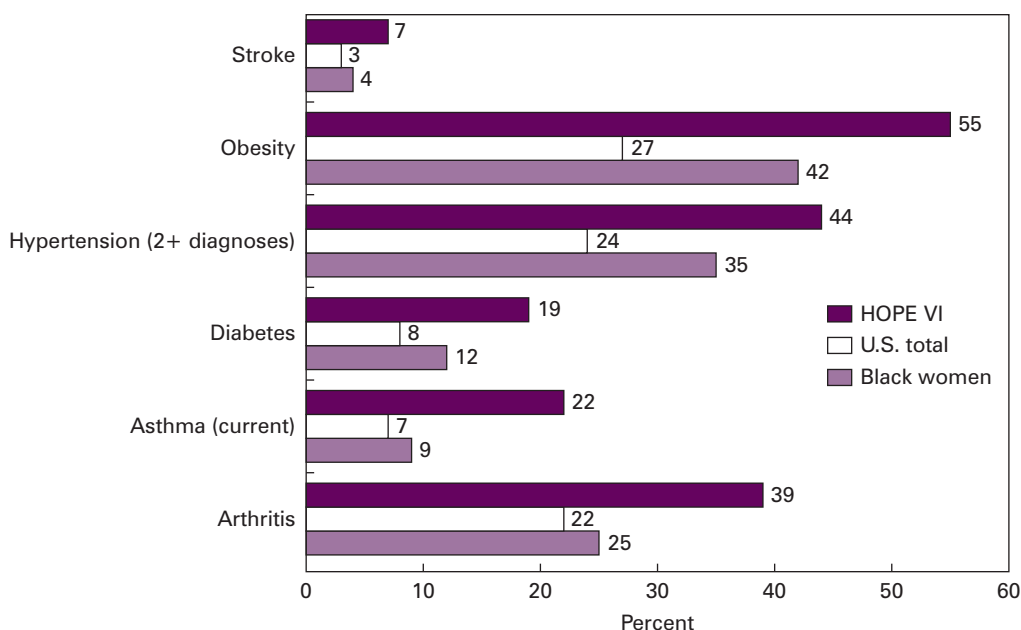
- More than half (54 percent) of respondent reported having an illness requiring regular, ongoing care in 2009, up significantly from 44 percent in 2005 and 37 percent in 2001.
- In 2009, more than half (51 percent) of Madden/Wells respondents reported having been diagnosed with two or more major health conditions, including arthritis, asthma, diabetes, hypertension, obesity, and stroke. Figure 2 compares the Madden/Wells sample with national averages and averages for black women. Madden/Wells respondents report such conditions at far higher rates than other Americans, with no improvements since 2005.
- Madden/Wells respondents also continue to suffer from poor mental health overall: 17 percent of respondents

reported poor overall mental health,<sup>4</sup> and 8 percent had major depressive episodes in the previous year<sup>5</sup>; there was no improvement over 2005 or 2001. However, as noted above, there was one bright spot: respondents in 2009 reported fewer anxiety episodes after relocation: 17 percent had such episodes in 2009, a significant decrease from the 2001 baseline, when 28 percent reported experiencing anxiety.

- Not only do Madden/Wells respondents experience high rates of disease, they are also markedly debilitated by their illnesses, reporting severe difficulty with activities of daily living at levels well above national averages. One in four respondents reported severe difficulty with three or more activities, compared with only 4 percent of the general population and 6 percent of black women.<sup>6</sup> Not surprisingly, more than one in three respondents (36 percent) reported that their physical health had interfered with their job or education in the previous year.
- Lack of access to quality medical care may play a role in poor health outcomes.

*“Residents’ reports indicate a population in distress, with extraordinarily high rates of chronic, debilitating illness. The only positive change since 2005 is a reduction in anxiety and worry, which may reflect respondents’ improved living circumstances.”*

FIGURE 2. Major Illness among HOPE VI Respondents and Nationwide Comparison Groups



Sources: 2001, 2005, and 2009 Chicago Panel Study Sample and 2008 National Health Interview Survey.

Note: Only arthritis experienced a significant change from 2005 at the  $p < .10$  level; total respondents who had ever been diagnosed with arthritis increased from 26 percent, which was significantly different from 2009 at the  $p < .05$  level.

Renee and her five youngest children live in a house on the far South Side of Chicago. She and her children have moved twice since they left Madden/Wells. They moved to their current house about nine months before we spoke to them. Renee suffers from clinical depression and is on disability because of her mental health problems. However, despite her ongoing problems, she says she feels less worried and sleeps better since she left public housing.

No, they did so much shooting [in Madden/Wells] and then people would come to your door. They'll ruin your house if you leave it open. . . . But I was just worrying . . . because one time I was looking out my window, a bullet went past my head and my daughter, the bullet came through the house. It went right through the wall. Came through, boom! And we had just walked from right by the wall. . . . So far, I don't be worrying about nothing [here].

Only 30 percent of the Madden/Wells respondents said they used a doctor's office for routine medical care, compared with 65 percent of Americans and 66 percent of black women. Instead of a doctor's office, most Madden/Wells respondents used a hospital outpatient clinic (41 percent) or a community health center (16 percent). Without a regular "medical home," Madden/Wells residents may not be able to effectively manage their chronic conditions. Respondents' use of dental care was closer to national averages, but still relatively low: 48 percent of residents had been to a dentist in the previous year, compared with 60 percent of Americans and 54 percent of black women.

### **Mortality Rates Are Shockingly High**

In 2005, we noted that death rates for the five-site HOPE VI Panel Study sample overall far exceeded national averages. As

a benchmark, we compared Panel Study rates to those for the Moving to Opportunity Demonstration control group; rates for the Panel Study sample were considerably higher (Manjarrez et al. 2007). The 2009 follow up of the Madden/Wells sample shows that for CHA families, this grim trend has continued: mortality rates are shockingly high.

- A stunning 14 percent of Madden/Wells respondents in the CHA Panel Study sample were deceased by 2009. The mortality rate for the Madden/Wells sample is approximately *twice as high* as in the general population, continuing the trend from 2005 (see figure 3).<sup>7</sup>
- To understand the factors that might underlie this high mortality rate, we conducted multivariate analysis. The results showed that once we controlled for such factors as age, male respondents and those who reported poor overall mental health at the baseline in 2001 were more likely to have died by 2009.<sup>8</sup>

Three years ago, Michelle and her daughter Tonya, now 18, moved from Madden/Wells into Oakwood Shores, the new mixed-income community. Michelle also has two adult children, whom she raised in Madden/Wells. She says she no longer feels worried and stressed out because she feels so much safer:

I used to worry my ass off . . . in Madden/Wells about shooting. . . .

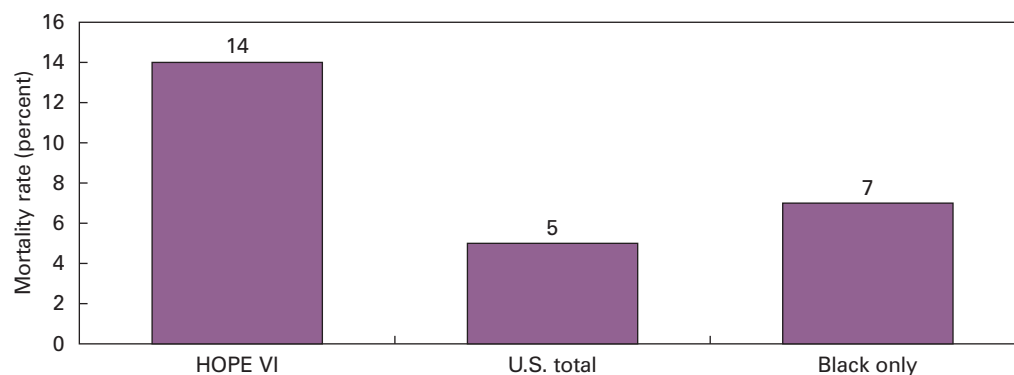
Q: So how has not worrying about that affected you and your family?

Well, I don't worry and be all stressed out and you know, shaking all the time now. I'm relaxed. I'm calming down. I enjoy myself.

---

*"14 percent of Madden/Wells respondents were deceased by 2009. The mortality rate is approximately twice as high as in the general population, continuing the trend from 2005."*

FIGURE 3. Mortality Rates in HOPE VI and Comparison Populations



Sources: 2009 Chicago Panel Study Sample and 2004 National Vital Statistics Reports.

### Implications

The overall CHA Panel Study findings suggest that it has been easier to improve residents' life circumstances than to address their physical and emotional health. That is, the CHA has succeeded in providing residents with better housing in less poor neighborhoods that are dramatically safer than their original public housing developments. But moving to better quality housing in a safer community has not been enough to undo the damage that years of living in a dangerous, stressful environment has done to residents' health. Assuming Madden/Wells respondents are reasonably representative of other CHA households (and other research suggests they are),<sup>9</sup> the overall CHA population remains extremely vulnerable, with too many residents suffering from serious, chronic conditions that impede their functioning, particularly their ability to work. To address this worsening crisis, the CHA must increase its focus on health and form partnerships to bring services to its residents. Specifically, the CHA should

- **Strengthen its partnerships with public and nonprofit agencies that can provide improved health services for its residents.** For example, the agency should work with the Department of Public Health to ensure that federally qualified health centers are located near their developments. The U.S. Department of Health and Human Services (HHS)

Public Housing Primary Care Centers provide one avenue for funding such centers. Another possibility is reaching out to local hospitals and medical centers in Chicago that can provide mobile vans to offer regular primary health care and dental care to CHA's residents. Finally, the CHA should explore other options, such as public health interventions that train residents to be community health workers.

- **Promote healthy living and physical activity.** CHA residents will not be physically active unless they feel safe being outside. Therefore, the most critical thing that the CHA can do is work to sustain the safety improvements in its public housing and mixed-income developments that have so improved the overall quality of life for its residents. The agency should also look for resources or partnerships to create recreation centers in or near its developments, or potentially to provide "scholarships" for gym membership for CHA residents.
- **Consider alternative definitions of self-sufficiency.** As we have written previously (see Popkin 2010), while the emphasis of the Plan for Transformation has been on helping residents improve their economic circumstances, poor health might make work an unrealistic goal for many. The CHA may want to consider alternative standards for these residents, instead helping them manage their health conditions effectively as a means to reducing their use of emergency

and other services. Providing support and incentives for obtaining mental health services is especially important, particularly for residents with young children.

## Notes

1. All reported differences in means and proportions are significant at the  $p < .10$  level.
2. National health data in this brief, unless otherwise noted, are published by the U.S. Department of Health and Human Services as the 2008 National Health Interview Survey (NHIS) age-adjusted summary health statistics for U.S. adults. Many health problems vary significantly by gender and race, and because over 88 percent of the adults in the Madden/Wells sample are women and all are black, a sample of black women nationally is used as the comparison group. National Health Interview Survey data are broken down by sex and race, but not further by poverty status. Nationally, approximately a third of all black women live in households with incomes below the poverty level. Therefore, the comparison data are biased slightly upward in terms of better health because of the relatively better economic well-being of the national population of black women compared with the HOPE VI sample. However, even limiting the comparisons to similar gender, race, and age groups, adults in the HOPE VI study experience health problems more often than other demographically similar groups.
3. Change in health status was modeled using a multivariate logistic regression; the dependent variable was whether health was reported as fair or poor in 2009 among those who reported excellent, very good, or good health in 2001. Those with higher ages ( $p < .05$ ) and those who had been in public housing for at least 10 years ( $p < .05$ ) were more likely to report such a negative change, while housing assistance status in 2009, gender, having an income under \$10,000, depression, and overall mental health in 2001 were also controlled for, and not associated with changes in overall health status.
4. Overall mental health is based on the mental health inventory five-item scale (MHI-5).
5. Major depressive episodes are based on the Composite International Diagnostic Interview Short Form (CIDI-SF) major depression index for episodes over the past year.
6. Respondents were asked how difficult it is to perform each of seven activities: walk a quarter of a mile; climb 10 steps without resting; stand for two hours; sit for two hours; stoop, bend, or kneel; reach over their heads; and carry 10 pounds. Severe difficulty is defined as a response of "very difficult" or "can't do at all." Comparisons are from non-age-adjusted NHIS sample adult file from 2008.
7. The mortality rate for the general population is calculated by determining the probability that each respondent would survive based on averages for

people of their age and sex, using a 2004 National Vital Statistics Reports life table.

8. Mortality was modeled using a multivariate logistic regression. Those with higher ages ( $p < .01$ ), men ( $p < .05$ ), and those who reported poor mental health in 2001 ( $p < .10$ ) were more likely to have died by 2009. Depression, chronic health conditions, poor overall health, incomes under \$10,000, and being a public housing resident for at least 10 years in 2001 were also controlled for, and not associated with mortality.
9. See Popkin (2010) and Ernst (2007) for discussions of CHA residents' health.

## References

- Bosworth, Hayden B., Ilene C. Siegler, Beverly H. Brummett, John C. Barefoot, Redford B. Williams, Nancy E. Clapp-Channing, and Daniel B. Mark. 1999. "The Association between Self-Rated Health and Mortality in a Well-Characterized Sample of Coronary Artery Disease Patients." *Medical Care* 37(12): 1226–36.
- Buron, Larry, and Susan J. Popkin. 2010. "After Wells: Where Are the Residents Now?" *CHA Families and the Plan for Transformation* Brief 1. Washington, DC: The Urban Institute.
- Ernst, Michelle. 2007. *Neighborhood Safety and Leaseholder Characteristics*. Chicago: National Opinion Research Center.
- Franks, Peter, Marthe R. Gold, and Kevin Fiscella. 2003. "Sociodemographics, Self-Rated Health, and Mortality in the U.S." *Social Science and Medicine* 56(12): 2505–14.
- Lindberg, Ruth A., Edmond D. Shenassa, Dolores Acevedo-Garcia, Susan J. Popkin, Andrés Villaveces, and Rebecca L. Morley. Forthcoming. "Housing Interventions at the Neighborhood Level and Health: A Review of the Evidence." *Journal of Public Health Management and Practice*.
- Manjarrez, Carlos A., Susan J. Popkin, and Elizabeth Guernsey. 2007. "Poor Health: Adding Insult to Injury for HOPE VI Families." *HOPE VI: Where Do We Go from Here?* Brief 5. Washington, DC: The Urban Institute.
- Popkin, Susan J. 2010. "A Glass Half Empty? New Evidence from the HOPE VI Panel Study." *Housing Policy Debate*. 20(1): 43–63.
- Popkin, Susan J., and David J. Price. 2010. "Escaping the Hidden War: Safety Is the Biggest Gain for Chicago Housing Authority Families." *CHA Families and the Plan for Transformation* Brief 3. Washington, DC: The Urban Institute.
- Popkin, Susan J., Diane K. Levy, Larry Buron. 2009. "Has HOPE VI Transformed Residents' Lives? New Evidence from the HOPE VI Panel Study." *Housing Studies* 24(4): 477–502.
- Popkin, Susan J., Bruce Katz, Mary K. Cunningham, Karen D. Brown, Jeremy Gustafson, and Margery Austin Turner. 2002. "HOPE VI Panel Study: Baseline Report." Washington, DC: The Urban Institute.

## About the Authors



**David J. Price** is a research assistant in the Urban Institute's Metropolitan Housing and Communities Policy Center.



**Susan J. Popkin** is director of the Urban Institute's Program on Neighborhoods and Youth Development and a senior fellow in the Metropolitan Housing and Communities Policy Center.



## **The Chicago Panel Study**

The Chicago Panel Study is a follow-up to the five-site HOPE VI Panel Study, which tracked resident outcomes from 2001 to 2005. The Chicago Panel Study continues to track the residents from the Chicago Housing Authority's Ida B. Wells Homes/Wells Extension and Madden Park Homes who were part of the original HOPE VI Panel sample. In October 2009, the CHA marked the 10th anniversary of the Plan for Transformation; the purpose of the Chicago Panel Study is to track the circumstances of the families in the Chicago HOPE VI Panel Study sample to assess how they are faring as the Plan for Transformation progresses.

Revitalization activities began in Madden/Wells in mid- to late 2001, and the last residents were relocated in August 2008. At the baseline in summer 2001, we surveyed a random sample of 198 heads of household and conducted in-depth, qualitative interviews with seven adults and seven children. We conducted follow-up surveys and interviews for the HOPE VI Panel Study in 2003 (n = 174, response rate 88 percent) and 2005 (n = 165, response rate 83 percent). In 2009, when we attempted to track the original Madden/Wells sample for the Chicago Panel Study, we surveyed 136 heads of household (response rate 69 percent) and conducted in-depth interviews with 9 adults and 9 children. The largest source of attrition between 2001 and 2009 was mortality; we were able to locate, if not survey, nearly all original sample members in the 2009 follow-up.

The principal investigator for the Chicago Panel Study is Susan J. Popkin, Ph.D., director of the Urban Institute's Program on Neighborhoods and Youth Development. Funding for this research was provided by the John D. and Catherine T. MacArthur Foundation. Finally, we wish to thank the CHA, the many colleagues who have assisted with and commented on this research, and most of all, the Chicago Panel Study respondents, who have so generously shared their stories with us for so many years.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders.

Permission is granted for reproduction of this document, with attribution to the Urban Institute.