## CHCS Center for Health Care Strategies, Inc.

## FACES OF MEDICAID DATA BRIEF

## Hospital Readmissions among Medicaid Beneficiaries with Disabilities: Identifying Targets of Opportunity

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reventing unnecessary readmissions among Medicaid beneficiaries offers tremendous opportunity to improve health care quality and reduce spending. This new Faces of Medicaid analysis was commissioned by the Center for Health Care Strategies (CHCS) to examine readmission rates among Medicaid beneficiaries with disabilities (defined for the study as those not dually eligible for Medicare, receiving Supplemental Security Income (SSI), and in fee-for-service care). The goal of the analysis was to identify potential opportunities to improve care and reduce recurring hospitalizations. It builds on previous CHCS Faces of Medicaid analyses that explored the patterns and prevalence of comorbidity within Medicaid populations and the impact of comorbidity on costs and utilization.<sup>1</sup> This analysis focuses on Medicaid beneficiaries with disabilities through a variety of lenses: by morbidity and comorbidity patterns; by state; and by whether or not beneficiaries had a physician visit between discharge and readmission. With great attention being paid to readmissions nationally and growing momentum to increase accountability for preventing these events, this analysis should help Medicaid stakeholders identify critical opportunities for intervention.

## In Brief

Preventable readmissions offer a key opportunity for states to improve quality and reduce costs. This analysis by Todd Gilmer, PhD, at the University of California, San Diego highlights opportunities for Medicaid stakeholders to target interventions for beneficiaries with disabilities at greatest risk for readmission. Select findings reveal:

- The 30-day readmission rate for Medicaid beneficiaries with disabilities was 16 percent, rising to 53 percent within one year.
- Fifty percent of those readmitted within 30 days did not visit a physician between discharge and readmission.
- The likelihood of readmission increased with the number of chronic conditions.

The analysis highlights the need for targeted action to reduce avoidable readmissions, particularly for high-risk populations. The finding that half of those who are readmitted within 30 days have not seen a physician in the interim demonstrates clear opportunities for intervention.

## BACKGROUND

The 2009 article by Steven Jencks and colleagues in the *New England Journal of Medicine* heightened attention to the problem of readmissions in the Medicare population<sup>2</sup> and provided a model for Medicaid and other payers to examine readmission trends in their own populations. According to Jencks' findings, nearly 20 percent of Medicare beneficiaries are readmitted to a hospital within 30 days of hospital discharge. While it is not clear how many of these readmissions could be prevented with better systems of ambulatory care, it is striking that fully half of the patients who are readmitted had no claims for physician visits between the discharge and readmission. In addition, some of the highest rates of readmissions occurred among persons who were discharged with chronic conditions that might be targeted by disease management and prevention programs.<sup>3</sup>

There are reasons to expect that patterns of readmission may be different among beneficiaries with disabilities in Medicaid programs. First, state-level policies, which play a critical role within Medicaid, may influence readmission rates.<sup>4</sup> Second, the pattern of chronic illness may vary between Medicare and Medicaid beneficiaries with disabilities, and thus the causes for readmission may differ among participants in these two programs. Finally, beneficiaries with disabilities have a high level of multimorbidity (i.e., multiple comorbidities) that may both predict readmission and identify opportunities for intervention.<sup>5</sup>

## STUDY DESIGN OVERVIEW

This analysis examines readmission rates among 941,208 fee-for-service, Medicaid-only beneficiaries with disability who were hospitalized during 2003-2005. It uses data from the Medicaid Analytical Extract (MAX) data system supplied by the Centers for Medicare & Medicaid Services .<sup>6,7</sup> The MAX data are constructed from the Medicaid Statistical Information System and include eligibility and claims data for all Medicaid beneficiaries from all 50 states plus the District of Columbia. The study focuses on beneficiaries with disabilities receiving cash assistance, since federal requirements for SSI ensure some level of comparability across state Medicaid programs. The analysis excludes Medicaid beneficiaries enrolled in managed care, as well as beneficiaries dually-eligible for Medicare, because the MAX data do not capture Medicare experience.<sup>8</sup> For a more detailed description of study methodology, see sidebar below.

## METHODOLOGY

This analysis followed the methods used by Jencks and colleagues to calculate 30-day, 60-day, 90-day, and 365-day readmission rates among fee-forservice, Medicaid-only beneficiaries with disabilities.9 The study first identified all beneficiaries who were hospitalized between January 1, 2003 and November 30, 2005. For each beneficiary within this group, the study identified their first hospitalization, excluding admissions that resulted in transfers to other acute care hospitals or death on the day of discharge, as well as their first readmission to a hospital, excluding readmissions for rehabilitation (based on receiving a primary diagnosis of V571, V5789, or V579). The probability of readmission was then calculated within the four timeframes listed above, excluding observations where the timeframe exceeded a beneficiary's window of eligibility. The percent of beneficiaries with readmissions within 30 days who did not receive any physician services between the time of discharge and the time of readmission was also estimated.

Next, the relationship between morbidity and hospital readmission was examined. For each beneficiary, morbidity was calculated using the Chronic Illness and Disability Payment System (CDPS).<sup>10</sup> CDPS is a risk adjustment model used to adjust capitated payments to health plans that enroll Medicaid beneficiaries. CDPS was used to map diagnosis codes from the calendar year prior to the index hospital admission to one of 58 CDPS categories within 19 major categories corresponding to type of disease (e.g., diabetes, infectious disease) or body system (e.g., cardiovascular, pulmonary).<sup>11</sup> The number of CDPS categories was also calculated for each beneficiary. Thirty-day readmission rates were compared by number of CDPS categories, and logistic regression was used to analyze the relationship between the probability of readmission within 30 days and specific CDPS categories. Incremental effects were estimated

for the 10 CDPS categories that were the most predictive of readmission.

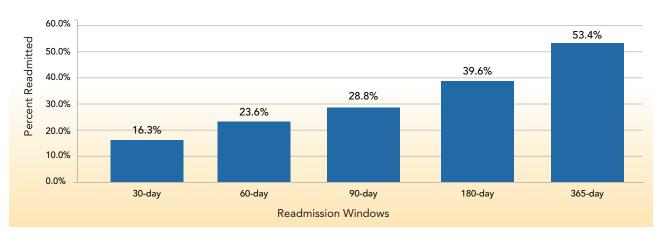
The predictive ability of specific comorbidities, defined as interaction across major CDPS categories, was also investigated as well as the impact of multimorbidity, defined as the number of major CDPS categories. A set of interaction variables was created across the CDPS major categories. Then a set of 19 logistic regressions was run, each including the full set of major categories in addition to one set of interaction variables.<sup>12</sup> All interactions with a logistic regression coefficient of 0.2 or greater (corresponding to approximately a 20 percent increase in the probability of readmission) were identified. These covariates were added into a final logistic regression including all 57 CDPS categories and indicator variables for the number of CDPS categories, and incremental effects were calculated.13

Finally, the analysis examined geographic variation in readmission rates among states and analyzed the relationship between readmission rates and market characteristics among hospital referral regions (HRRs).<sup>14</sup> Interstate variation in 30-day readmission rates among the Medicaid and Medicare programs was also compared. Logistic regression was used to estimate the relationship between the probability of readmission within 30-days, measures of supply in the market for health services, and Medicaid program characteristics. Market supply was measured at the hospital referral region and included the number of acute care beds, primary care physicians, and specialist physicians per 1,000 population. Medicaid program characteristics were measured at the state level and included the average price per inpatient day, number of outpatient visits, price per visit, number of pharmacy fills, and price per fill.<sup>15</sup> Incremental effects of statistically significant covariates were calculated and evaluated at two standard deviations.<sup>16</sup>

## **FINDINGS**

#### The 30-day readmission rate was 16.3 percent.

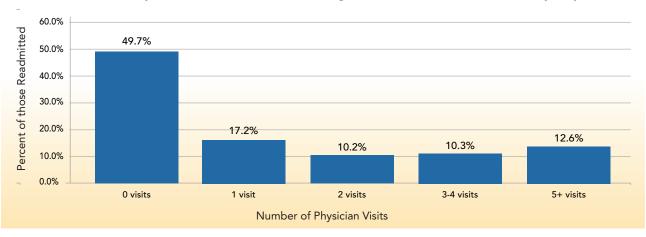
Exhibit 1 shows the 30-day, 60-day, 90-day, and 365-day readmission rates for Medicaid beneficiaries with disabilities in the study population. At 16.3%, the 30-day readmission rate was somewhat lower than Jencks finding of 19.6% among Medicare beneficiaries. Readmission rates climbed to 53.4 percent during a 365-day window.



### **Exhibit 1** Readmission Rates Among Medicaid Beneficiaries with Disabilities

# Fifty percent of those readmitted within 30 days did not have a physician visit between discharge and readmission.

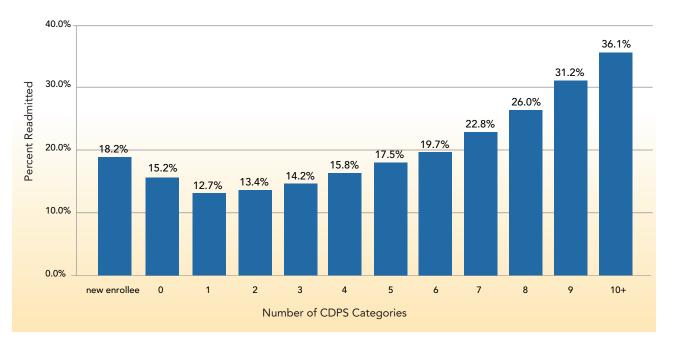
This finding is identical to Jencks' result among Medicare beneficiaries, and suggests a compelling opportunity for intervention. Exhibit 2 shows the number of physician visits between discharge and readmission among beneficiaries who were readmitted within 30 days. By encouraging greater continuity of care between hospitals and community physicians, states can promote more coordinated discharge planning and higher rates of physician follow-up. Potential mechanisms for doing so include the adoption of transitional care models, the creation of accountable care organizations, and the implementation of bundled payment methodologies, all of which are supported by a number of provisions under the Affordable Care Act and are of principal interest to the newly created Center for Medicare and Medicaid Innovation.



## Exhibit 2 Physician Visits Between Discharge and Readmission within Thirty Days

# The likelihood of readmission increases with the number of chronic conditions (i.e., CDPS categories).

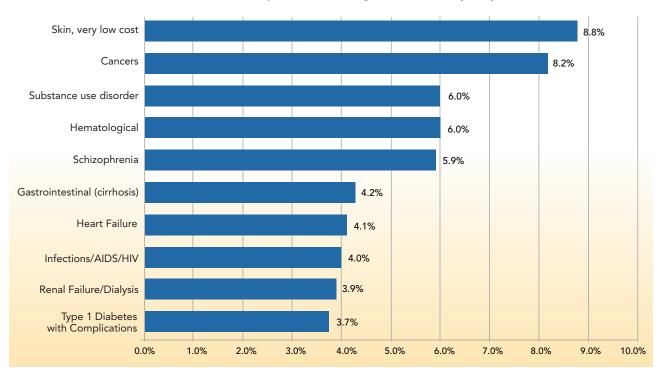
Exhibit 3 shows 30-day readmission rates by the number of CDPS categories. The probability of readmission is higher for newly enrolled beneficiaries (18.2 percent) than for beneficiaries with one CDPS category (12.7 percent). Newly enrolled beneficiaries may be in a more acute phase of their disability, resulting in higher admission rates.<sup>16</sup> Among those with one or more CDPS categories, the probability of readmission increases with the number of CDPS categories, and there is a much steeper gradient among beneficiaries with more than five CDPS categories: the probability of admission within 30 days increases from 19.7 percent among those with six CDPS categories to 36.1 percent among those with 10 or more CDPS categories.<sup>18</sup>



## Exhibit 3 | Thirty-Day Readmission Rate by Number of CDPS Categories

### Low-cost skin disorders comprised the CDPS category most predictive of readmission.

Exhibit 4 shows the incremental effects for 10 CDPS categories that were the most predictive of readmission within 30 days.<sup>19</sup> Perhaps surprisingly, the CDPS category most predictive of readmission was "skin, very low cost." The most common diagnosis in this category is cellulitis, infection of the skin caused by bacteria.<sup>20</sup> These infections may be the result of poor self-care combined with a compromised immune system, possibly resulting from cancer, HIV/AIDS, substance abuse, or homelessness. Beneficiaries receiving diagnoses related to "skin, very low cost" in the previous year were 8.8 percentage points more likely to be readmitted to the hospital within 30 days (or 54 percent more likely from a base rate of 16.3 percent).



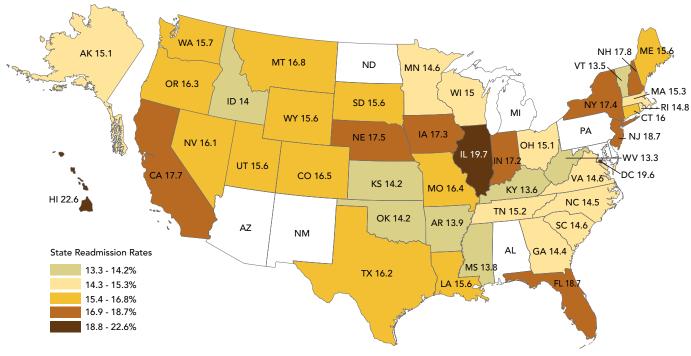
#### Exhibit 4 Incremental Effects of Major CDPS Categories on Thirty-Day Readmission Rates

Other CDPS categories that were highly predictive of readmission included cancers, substance use disorder, hematological disorders, and schizophrenia. Slightly less predictive, but still important predictors of readmission included gastrointestinal conditions (most commonly cirrhosis), heart failure or complications related to devices of grafts, infections including AIDS / HIV, renal failure or dialysis, and type 1 diabetes with complications. Heart failure is another well-identified condition for which there exist interventions with documented cost effective-ness at reducing readmission.<sup>21</sup> Cancer and renal failure / dialysis may represent conditions for which readmissions are more likely to be planned, and are therefore less appropriate targets for intervention.

A number of combinations of conditions represent key opportunities for intervention. For example, the combination of cardiovascular and pulmonary conditions is associated with an 11 percent increase in the probability of readmission. This risk is 1.7 percentage points greater than the cumulative probability of readmission of each category alone. Although this incremental effect is relatively small, 16.5 percent of the population had this specific interaction, making it a prime target for intervention. To note, this is the only specific combination of conditions identified by the analysis as having an "interaction effect" – meaning that the predicted impact of the combination of conditions on readmissions is greater than the cumulative effect of each condition alone. That said, even without an interaction effect, the cumulative risk of readmission associated with specific combinations of conditions is worth noting as potential targets for intervention or for prioritizing efforts to reduce readmissions. For example, the combination of schizophrenia and substance use increases the probability of readmission by 11.9 percentage points, or 73 percent. This finding complements recent analyses demonstrating that the combination of mental illness and substance abuse is associated with a 4 to 5-fold increase in overall hospital admission rates for chronically ill populations.<sup>22</sup> In combination with the findings above, this finding suggests that Medicaid beneficiaries with schizophrenia and/or substance use who are homeless provide a well-identified target for intervention.<sup>23</sup>

#### State policies may be an important factor affecting readmission rates.

Exhibit 5 displays 30-day readmission rates by state. Lower readmission rates were found in the South, and higher rates in the Mid-Atlantic, parts of the Midwest, Florida, California, and Hawaii. There is greater variation in Medicaid readmission rates than there is in Medicare, suggesting that state-level polices are an important factor affecting readmission rates. The weighted state-level standard deviation in readmissions across Medicaid programs is 2.0 percentage points, or 13 percent of the mean, while the weighted state-level standard deviation readmissions in Medicare is 1.4 percentage points, or 7 percent of the mean. State-level Medicaid and Medicare readmissions are moderately correlated at 0.29.



### Exhibit 5 | Thirty-Day Readmission Rates by State

Source: Author's analysis of MAX data, 2003-2005.

## Providing more primary care visits and paying a higher average price per visit were associated with lower rates of readmission.

The effects of market supply and Medicaid program characteristics on readmission rates are shown in Exhibit 6. The regression analysis indicated that measures of both market supply and Medicaid program characteristics were predictive of readmission within 30 days.<sup>24</sup> Providing more primary care visits and paying a higher average price per visit were associated with lower rates of readmission: the combined effect of a two standard deviation change in both of these variables reduced the probability of readmission by 1.9 percentage points, or 11.7 percent. These results lend further support to the above suggestion that increased access to primary care or more intensive or more expertly coordinated primary care results in reduced rates of readmission. Conversely, the number of specialists at the HRR level was positively associated with readmission: the incremental effect of moving from one standard deviation below to one standard deviation above the mean (from 33.5 to 55.9 specialists per 1,000 persons) increased the probability of readmission by 2.2 percentage points, or 13.5 percent. This finding suggests that more intensive specialty care or less coordinated care may increase readmission rates.

MARKET SUPPLY	MEAN	SD**	Percentage Point Effect of 2 SD Change on the Probability of Readmission
Acute Care Beds / 1,000 pop.	2.7	0.6	-0.2
Primary Care Physicians / 1,000 pop	71.3	12.9	-0.5
Specialist Physicians / 1,000 pop	44.7	11.2	2.2 *
MEDICAID PROGRAM CHARACTERISTICS			
Price per Hospital Day	\$1,465	348	0.5
Primary Care Visits	16.1	4.3	-1.0 *
Price per Visit	\$117	22	-0.9 *
Pharmacy Fills	34.1	8.5	0.5
Price per Fill	\$76	9	1.3 *
* P<.05 ** SD refers to standard deviation.			

## **Exhibit 6** Measures of Market Supply and Medicaid Program Characteristics

## The probability of readmission was positively related to the average price of pharmaceuticals prescribed at the state level.

Prescribing a more expensive mix of medications at the state level was predictive of a higher rate of readmissions: a two standard deviation increase in pharmacy costs increased readmission rates by 1.3 percentage points or 8 percent. There are several possible interpretations for this finding. First, the finding may be causal. For example, the use of more complex pharmacotherapy may increase the incidence of side effects or acute reactions from interactions, perhaps even from contraindicated medications, resulting in an increased rate of readmission. However, this finding may also be spurious. For example, it may be that states that employ the latest technology (including the newest medications) are the same states that promote more hospital-based care and therefore have the highest readmission rates. Alternatively, this finding could be subject to reverse causality if new medication regimens are started during readmissions, and thus readmissions increase the complexity of pharmacotherapy.

## **IMPLICATIONS/NEXT STEPS**

This analysis demonstrates a high prevalence of readmissions among Medicaid beneficiaries with disability, and that 50 percent of the beneficiaries who are readmitted do not see a physician following hospital discharge prior to the readmission. Further, the findings reveal that beneficiaries with multiple comorbidities have much higher rates of readmission than beneficiaries with fewer diagnostic problems. Readmission rates are particularly high among beneficiaries with mental illness, substance use disorder, skin infections, and infectious disease. Thus, focusing on better coordination and management of care for these beneficiaries, particularly for the homeless, should be considered. Additional targets of intervention may include heart failure, diabetes, and persons with comorbid cardiovascular and pulmonary disease.

These findings suggest that more effective coordination between inpatient and ambulatory care might lead to a reduction in readmission rates, and provide some support for the suggestion that, if effectively pursued, an increased emphasis on timely primary care may be accompanied by reduced rates of hospital readmission. There is a growing evidence base for models of care that coordinate transitions between inpatient and outpatient settings and reduce risk of readmission – for example, Mary Naylor's Transitional Care model,<sup>25</sup> Eric Coleman's Care Transitions <sup>26</sup> model, and the Guided Care<sup>27</sup> model developed by researchers at Johns Hopkins University. States could use payment policies and pilot initiatives to drive the adoption of models such as these that are known to reduce readmissions, thereby encouraging more collaboration and shared accountability between hospitals and physicians.

The results presented here suggest opportunities for targeting these models to populations at greatest risk of readmission. In particular, this analysis reinforces the impact of behavioral health comorbidities on hospitalization rates.<sup>28</sup> The dramatic increase in readmission risk for individuals with co-occurring schizophrenia and substance abuse highlights the need for improved coordination across physical and behavioral health systems, particularly in discharge planning. Accordingly, the adoption of models aimed at improving care transitions should explicitly address the coordination of physical, mental health, and substance abuse treatment needs.

Today, Medicaid agencies nationwide are exploring innovative ways to use limited public health care dollars to cover an expanding population of beneficiaries. Preventing costly readmissions represents a critical strategy to both improve health care quality for Medicaid's highest-risk subset and curtail unnecessary spending. The findings in this analysis provide new insights to help states better target efforts for reducing readmission rates.

## Endnotes

- <sup>1</sup> R. G. Kronick, M. Bella, T.P. Gilmer. The Faces of Medicaid III: Refining the Portrait of People with Multiple Chronic Conditions. Center for Health Care Strategies, Inc., October 2009.
- <sup>2</sup> S. Jencks, M. Williams, and E. Coleman. "Rehospitalizations among patients in the Medicare fee-for-service program." *New England Journal of Medicine*. 360:1418-28.
- <sup>3</sup> J. Sisk, P. Hebert, C. Horowitz, M. McLaughlin, J. Wang, and M. Chassin. "Effects of nurse management on the quality of heart failure care in minority communities: a randomized trial." Annals of Internal Medicine. 145(4):273-83; P. Gibson, H. Powell, A. Wilson, M. Abramson, P. Haywood, A. Bauman, M. Hensley,

E. Walters, and J. Roberts. "Self-management education and regular practitioner review for adults with asthma." Cochrane Database of Systematic Reviews 2002, Issue 3; P. Hebert, A. McBean, and R. Kane. "Explaining trends in hospitalization for pneumonia and influenza in the elderly." Medical Care Research and Review. 62(5):560-82.

- <sup>4</sup> R. Kronick and T. Gilmer. "Understanding the null relationship between state-level Medicare and non-Medicare spending." Under review at *Health* Affairs.
- <sup>5</sup> R. Kronick, M. Bella, T. Gilmer, and S.A. Somers. *The Faces of Medicaid II: Recognizing the Care Needs of People with Multiple Chronic Conditions*. Center for Health Care Strategies, Inc., October 2007.
- <sup>6</sup> http://www.cms.hhs.gov/medicaiddatasourcesgeninfo/07\_maxgeneralinformation.asp
- <sup>7</sup> Maine did not submit data for 2005, and thus the data for Maine cover only 2001-2004. We exclude six states with a high rate of managed care penetration (AZ, DE, MD, MI, NM, PA), under the assumption that the remaining beneficiaries would be non-representative of the general Medicaid population in that state. We also exclude two states due to the poor quality of their hospital admission data (AL, ND).
- <sup>8</sup> We exclude Medicaid beneficiaries in comprehensive managed care plans (e.g., HMOs). We do not exclude beneficiaries in primary care case management. We include beneficiaries who were not enrolled in HMOs for physical health care but who were enrolled in managed behavioral health plans; we adjust our analyses to account for the loss of information on psychiatric admissions.
- <sup>9</sup> S. Jencks, et al., op. cit.
- <sup>10</sup> R. Kronick, T. Gilmer, T. Dreyfus, and L. Lee. "Improving health-based payment for Medicaid beneficiaries: CDPS." *Health Care Financing Review*. 21(3):29-36.
- <sup>11</sup> For example, if a beneficiary was admitted to the hospital in July 2003 (or any time during 2003), their CDPS score was calculated over CY 2002. Beneficiaries without at least one-month eligibility in the prior calendar year were excluded from these analyses.
- <sup>12</sup> For example, one regression includes cardiovascular interacted with the other 18 CDPS major categories, and another regression includes psychiatric interacted with the other 18 CDPS major categories.
- <sup>13</sup> Given the large sample size, we decided to use a criterion based on effect size rather than statistical significance; .2 corresponds to an approximate 20% increase, not a 20 percentage point increase.
- <sup>14</sup> Data were downloaded from the Dartmouth Atlas of Health Care: http://www.dartmouthatlas.org/index.shtm
- <sup>15</sup> Medicaid program characteristics were derived from the MAX data. Outpatient visits included visits to physicians, clinics, outpatient hospital departments, and community mental health centers. The price per pharmacy fill is evaluated at the average price at the NDC code level, and therefore reflects the mix of drugs provided.
- <sup>16</sup> We calculated the incremental effect for each market supply variable or Medicaid program characteristic of moving from one standard deviation below the mean to one standard deviation above the mean.
- <sup>17</sup> The '0 CDPS' group (15.2% readmission rate) also includes some proportion of newly eligible beneficiaries. Among beneficiaries eligible for one to three months in the previous calendar year, 32% had 0 CDPS categories, compared to 9% overall.
- <sup>18</sup> However, relatively few beneficiaries have 6 or more CDPS categories. From 6 to 10, the percentages are 4.0%, 2.3%, 1.3%, 0.7%, and 0.6%; 91.2% have 5 or fewer.
- <sup>19</sup> These are the 10 most predictive categories from a regression including all CDPS categories. Some of the CDPS categories presented are combinations of CDPS categories. For example, the Cancers category includes high and medium, hematological includes extra high, very high, and medium, and infections includes AIDS, high, HIV, and medium.
- <sup>20</sup> People at risk for cellulitis and its complications include those who have a compromised immune system due to such diseases as HIV/AIDS or combined immunodeficiencies; other risk factors include having diabetes, cancer, animal bites, human bites, severe burns, or severe trauma. Cellulitis is treatable, but in some people, such as those with diabetes, cellulitis can be serious and lead to gangrene and other potentially life-threatening complications.
- <sup>21</sup> P. Hebert, J. Sisk, J. Wang, L. Tuzzio, J. Casabianca, M. Chassin, C. Horowitz, and M. McLaughlin. "Cost-effectiveness of nurse-led disease management for health failure in an ethnically diverse urban community." *Annals of Internal Medicine*, 149(8):540-8.
- <sup>22</sup> C. Boyd, B. Leff, C. Weiss, J. Wolff, A. Hamblin, and L. Martin. Clarifying Multimorbidity Patterns to Improve Targeting and Delivery of Clinical Services for Medicaid Populations. Center for Health Care Strategies, Inc., December 2010.
- <sup>23</sup> T. Gilmer, A. Stefancic, S. Ettner, W.G. Manning, and S. Tsemberis. "Effect of Full Service Partnerships on homelessness, use, and costs of mental health services use, and quality of life among adults with serious mental illness." Archives of General Psychiatry. In Press; M. Larimer, D. Malone, M. Garner, D. Atkins, B. Burlingham, H. Lonczak, K. Tanzer, J. Ginzler, S. Clifasefi, W. Hobson, and G. Marlatt. "Health care and public service use and costs before and after provision of housing for chronically homeless persons with severe alcohol problems." Journal of the American Medical Association. 301(13):1349-1357.
- <sup>24</sup> The logistic regression was at the person level and included measures of market supply measured at the HRR level and Medicaid program characteristics measured at the state level. Both sets were averaged over 2001-2005. A robust covariance matrix was used to account for clustering at the HRR level. All reported effects were statistically significant at p<.01.</p>
- <sup>25</sup> M. Naylor, D. Brooten, R. Campbell, G. Maislin, K. McCauley, and J. Schwartz. "Transitional Care of Older Adults Hospitalized with Heart Failure: A Randomized, Controlled Trial." Journal of the American Geriatrics Society. 2004; 52: 675–684.
- <sup>26</sup> E. Coleman, C. Parry, S. Chalmers, and S. Min." <u>The Care Transitions Intervention: Results of a Randomized Controlled Trial</u>." Archives of Internal Medicine. 2006;166:1822-8.
- <sup>27</sup> M. Sylvia, M. Griswold, L. Dunbar, C. Boyd, M. Park, and C. Boult. "<u>Guided Care: Cost and Utilization Outcomes in a Pilot Study</u>." Disease Management. 2008;11(1):29-36.
- <sup>28</sup> C. Boyd, et al., op. cit.

#### **Additional Resources**

Hospital Readmissions among Medicaid Beneficiaries with Disabilities: Identifying Targets of Opportunity is part of CHCS' Faces of Medicaid data series designed to help Medicaid stakeholders identify subsets of patients or conditions that are most likely to benefit from care management. This is one of a number of tools being produced by CHCS through the *Rethinking Care Program*. This national initiative, made possible by Kaiser Permanente, was developed by CHCS to design and test better approaches to care for Medicaid's highest-need, highest-cost beneficiaries.

For more information about the *Rethinking Care Program*, as well as tools for improving care management for Medicaid beneficiaries with complex needs, visit **www.chcs.org**.

#### About the Center for Health Care Strategies

The Center for Health Care Strategies (CHCS) is a nonprofit health policy resource center dedicated to improving health care quality for low-income children and adults, people with chronic illnesses and disabilities, frail elders, and racially and ethnically diverse populations experiencing disparities in care. CHCS works with state and federal agencies, health plans, providers, and consumer groups to develop innovative programs that better serve people with complex and high-cost health care needs. Its program priorities are: enhancing access to coverage and services; improving quality and reducing racial and ethnic disparities; integrating care for people with complex and special needs; and building Medicaid leadership and capacity. For more information, visit www.chcs.org.