



# 2018 Health Equity Report

Patient Care Through An Equity Lens







At **Rush**, we believe that addressing **health equity** means **removing obstacles** to good health so that everyone can attain their full health potential.

# 2018 Health Equity Report

## Patient Care Through An Equity Lens

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# What is health equity? And what is Rush doing to achieve it?

The Robert Wood Johnson Foundation, the largest philanthropic organization in the U.S. devoted to health, has a good definition of health equity:

Health equity means everyone has a fair and just opportunity to be healthier. It acknowledges that it's hard to be healthy without access to good jobs, homes and schools. It requires concerted effort to increase opportunities to be healthier for everyone — especially those whose obstacles are greatest.



## Want to read about what Rush is doing to achieve excellence in health equity?

These three publications will tell you more. You can find them at [rush.edu/about-us/rush-community/roadmaps-and-reports](https://rush.edu/about-us/rush-community/roadmaps-and-reports)

- 1) Our **Community Health Needs Assessment (CHNA)** looks at community data to identify the inequities faced by people who live in some of the neighborhoods near Rush University Medical Center and Rush Oak Park Hospital.
- 2) The **Community Health Implementation Plan (CHIP)** outlines our goals and strategies for reducing hardship and improving well-being in those neighborhoods.
- 3) The **Community Benefits Summary** reports our progress toward CHIP goals.

One difference you'll see between those reports and this one: Because people identify with their neighborhoods more than they identify with their ZIP codes, the CHNA and CHIP organize information by community area. But at Rush, we collect patient data according to ZIP code, so that's how we mapped the data used in this report.



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## At Rush, we believe...

Addressing health equity means removing obstacles to good health so that everyone can attain their full health potential.

**This is Rush's first-ever health equity report.** Inside, you'll find a snapshot of patient data\* that sets a baseline for looking at the state of health equity at Rush. It tells us...

- Who our patients are
- Where we see health equity gaps and opportunities
- How our patients' issues reflect national health equity issues

\*We focus in this report on patients at Rush University Medical Center and Rush Oak Park Hospital. In the future, we hope to include Rush Copley Medical Center patients, too.

## Working toward health equity

Rush aims to provide the same excellent care to all patients, but we know that some of them need more care — and different kinds of care — to achieve the same health outcomes as others. Working toward health equity requires us to focus on the subsets of patients who are not thriving, and identify ways to improve their outcomes.

Our Community Health Needs Assessment revealed that life expectancy in the Rush service area ranges from 85 years on Chicago's Gold Coast to under 69 years in Garfield Park on the West Side, a 16-year gap between two neighborhoods just a few miles apart. And while many people think that violence is the main cause of this gap, in reality more than half of the premature deaths on the West Side are caused by cancer, heart disease, stroke, diabetes and infant mortality. Poverty, structural racism, neighborhood conditions, educational achievement and other factors are the root cause of many health inequities — and health care delivery plays an important role as well.

Our patients reflect the racial, ethnic, gender, geographic and national diversity of the Chicago region; a significant proportion of them are from the West Side neighborhoods near Rush University Medical Center. Overall, our patients receive excellent care, yet this report shows some areas of disparity and opportunities for improvement across all ages, races and ethnicities.

The Rush System has made health equity improvement a systemwide strategy. Instead of simply treating the illnesses that arise from inequities, we are working to create healthier communities. For example, we now screen our patients for the social determinants of health: When taking a patient's history, providers also ask about housing, transportation, food security and other issues — questions that haven't been part of the health care experience until now — and connect them with services as needed.

As the largest private employer on Chicago's West Side and an anchor institution in the community, we are committed to making sure that we boost the economic vitality of nearby neighborhoods that have been hit hard by poverty and structural racism. We have made a commitment to hiring locally and developing talent; using local labor for capital projects; buying and sourcing locally; investing locally and creating financial stability for Rush employees; and volunteering in the community.

We have analyzed and shared our community health data, which has spurred new community engagement efforts in our neighborhoods. Now, as the next step, we are analyzing and sharing our patient care data. As with any report, the data contained here is limited and perhaps raises more questions than answers. We hope it spurs interest among our staff, faculty, residents and students to contribute to Rush's health equity efforts.



**David Ansell, MD, MPH**

Senior Vice President for Community Health Equity, Rush University Medical Center  
Associate Provost for Community Affairs, Rush University



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**The Rush System has made health equity improvement a systemwide strategy. Instead of simply treating the illnesses that arise from inequities, we are working to create healthier communities.**

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## Patient data creates equity framework

Epidemiologists who focus on health equity have a passion for uncovering trends, using data to guide smart decisions and promoting the idea that everyone should have the opportunity to be healthy. That passion drove the creation of this report, where we use the principles of epidemiology to share what we know about the patients Rush serves — how many people we see, where they're from, who they are — and examine where we stand in a variety of areas related to health equity.

While Rush's Community Health Needs Assessment (a companion publication to this one) focuses on the health of people in the communities immediately surrounding Rush, here we focus on *all* the people who come through our doors. Many of them come from the West Side communities near Rush, but many also come from the wider metropolitan region.

In addition to examining the populations we serve, this report also bridges the fields of public health and health care by connecting health disparities at the national and local levels with reasons that patients are seen at Rush. We focus largely on disparities related to race and ethnicity, as these disparities remain pervasive in Chicago and in the U.S. overall.

At the same time, we know that a number of other factors can lead to health disparities, including age, gender, sexual orientation, gender identity, access to health care, education, occupation, income, neighborhood environment, trauma, life experiences and more. This is the first report of its kind at Rush; in future reports, we plan to focus on how these factors and other social determinants of health intersect.

Of course, creating reports is not enough. I hope that this report, in conjunction with Rush's substantial community engagement work, will serve as a call to action. Addressing health disparities takes ideas and commitment from people with a wide variety of experiences and expertise. Everyone in the Rush community, regardless of their role, has the opportunity to bring health equity into their work — and we hope you'll share your ideas about how we can work together toward equity.



**Brittney Lange-Maia, PhD, MPH**

Assistant Professor, Department of Preventive Medicine  
Rush University



In creating this report, we found many interesting stories in our data that reflect national trends in public health. We learned from the data challenges we encountered, and we're now equipped to build on this report with future epidemiological projects that look more specifically into some of the areas identified here.

**Eric Yang, MPH**  
Statistician  
Center for  
Community  
Health Equity  
Rush University  
Medical Center





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**Overall, the people seeking care at Rush are demographically, geographically and linguistically diverse.** However, when we document differences in who is using health services in different settings, we must pause and ask: Why? What are the structural factors that may be driving people to use the various components of health care delivery in a different way? And through reflection and action, how can we alter these structural factors to improve the equitable delivery of health care?

Raj C. Shah, MD

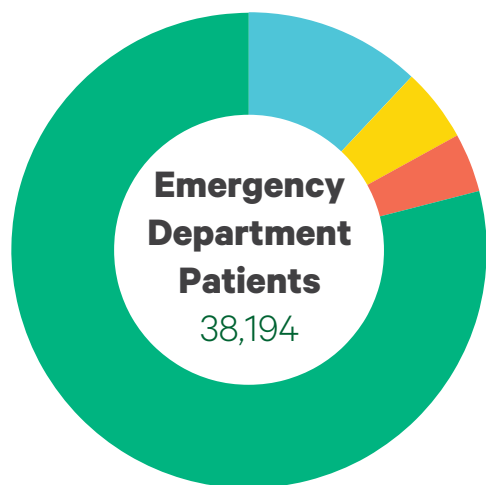
Co-director, Center for Community Health Equity  
Associate Professor, Department of Family Medicine and Rush Alzheimer's Disease Center, Rush Medical College

# Who are Rush patients? Where are they from?

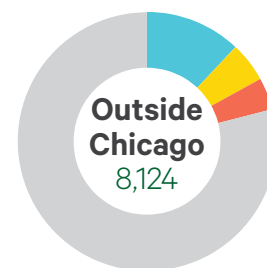
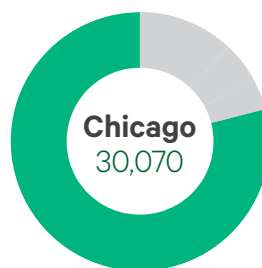
A lot of Rush’s health equity work is focused on the West Side communities closest to our Chicago campus — but here we’re looking more broadly at where our patients come from. The data in this section reflects patients who were seen at Rush between Jan. 1 and Dec. 31, 2017.



## Who comes to the Rush University Medical Center emergency department?



The biggest group (40 percent of patients and 43 percent of visits) came from the largest ZIP codes\* on the West Side of Chicago.



See [rush.edu/HealthEquityResources](http://rush.edu/HealthEquityResources) for maps of where each group of patients lived.

### Chicago Communities

West Side	15,412
Southwest Side	4,011
South Side	3,215
Far Southeast Side	1,565
North Side	1,464
Far Southwest Side	1,195
Loop	1,089
Northwest Side	1,064
Far North Side	1,055

### Top 5 of 84 Suburbs

Cicero	557
Oak Park	304
Berwyn	273
Riverdale	141
Maywood	139

### Top 5 Neighboring Counties

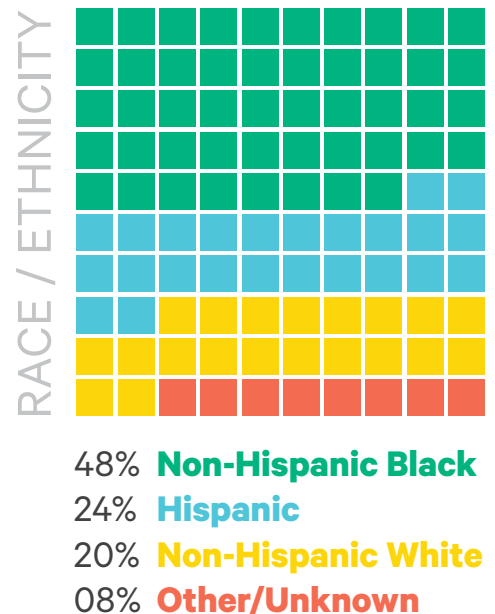
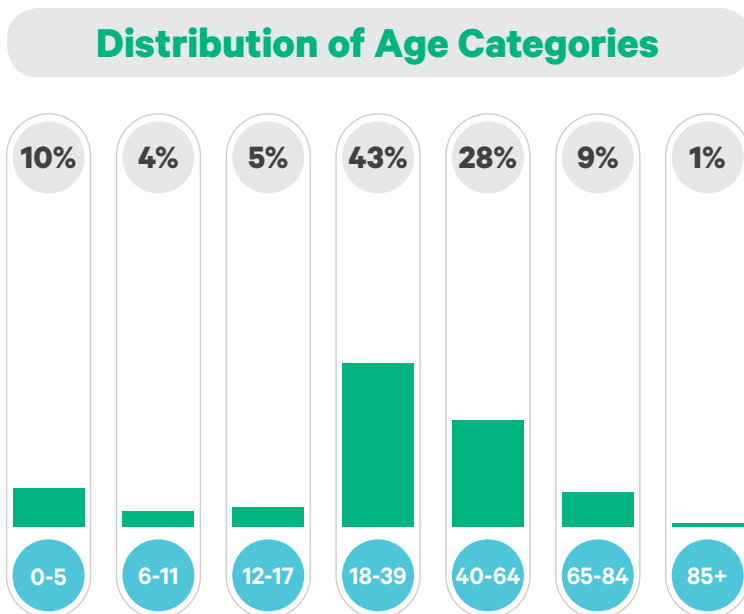
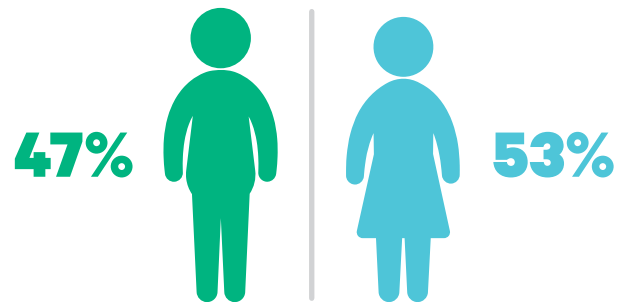
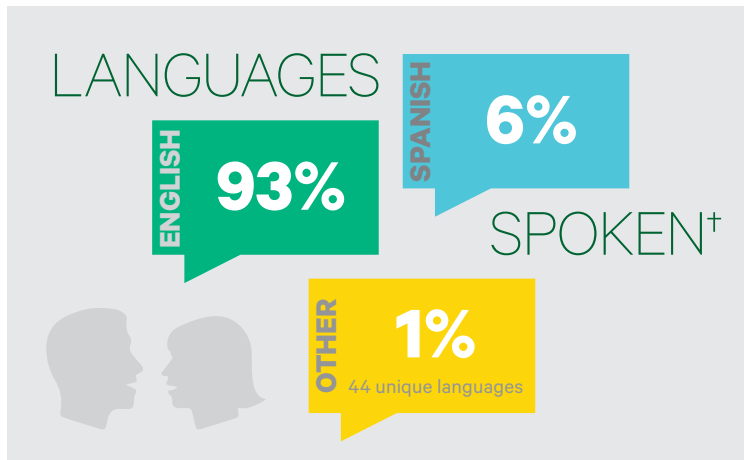
Dupage	644
Will	473
Lake	268
Kane	206
McHenry	100
Other Counties	1,867

\*60622, 60612, 60607, 60608, 60623, 60624, 60651, 60639, 60644.





**The patients were mostly English speakers, mostly adults, and slightly more women than men.\* Almost half identified themselves as non-Hispanic black.**

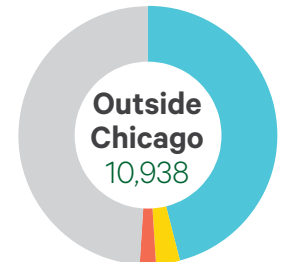
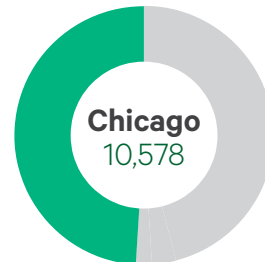
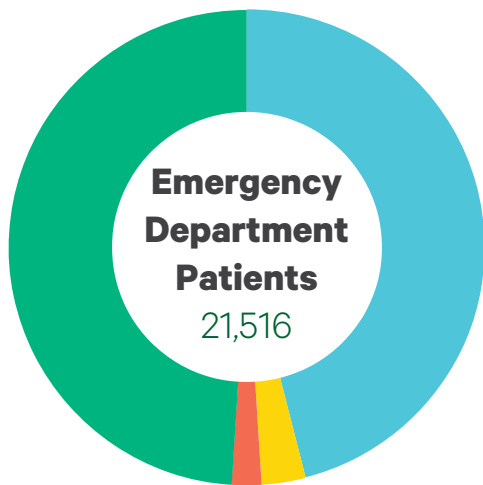


\*The data collected represent biologic sex; Rush is committed to equity of care, and respects that gender identity is not limited to the binary.  
<sup>†</sup>Based on preferred language listed in electronic health records.



## Rush Oak Park Hospital emergency department patients

About half of these patients came from Chicago’s West Side and half came from outside the city (mainly from Oak Park, Forest Park and Berwyn).



Rush Oak Park Hospital’s role is different from that of an academic health care institution; we take pride in being a center of community health expertise. Being early adopters of innovative programs to address health needs has helped us become an influencer of health outcomes — and giving is in the hearts of most health care providers, so our work to promote health equity simply makes sense.

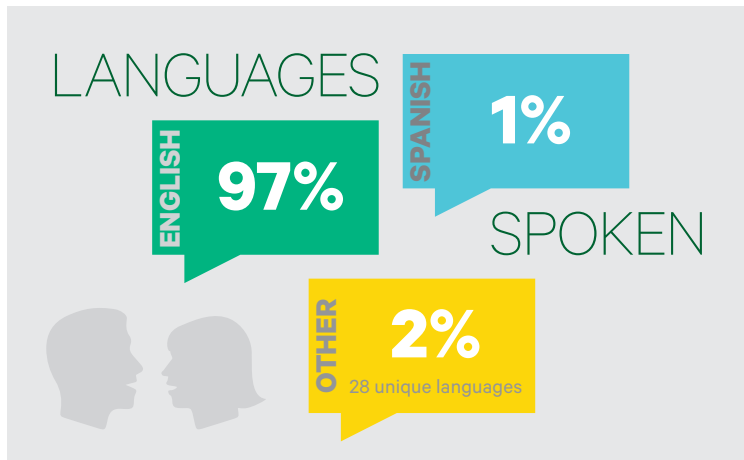
**Rachel E. Start, RN, MSN**  
Director, Ambulatory Nursing, Nursing Practice and Magnet Performance  
Rush Oak Park Hospital

Chicago Communities	
West Side	8,122
Northwest Side	1,091
Southwest Side	322
South Side	319
Far Southeast Side	171
North Side	169
Far North Side	149
Far Southwest Side	131
Loop	104

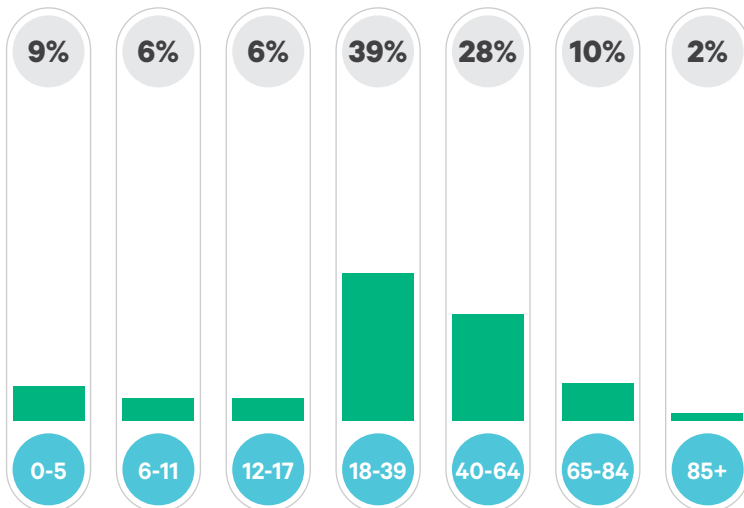
Top 5 of 78 Suburbs	
Oak Park	3,549
Forest Park	1,184
Berwyn	1,103
Elmwood Park	702
Maywood	626
Top Neighboring Counties	
Dupage	339
Will	118
Lake	38
Kane	79
Other Counties	489



**Patients were mostly adult English speakers. The percentage of non-Hispanic black patients was higher than at Rush University Medical Center, and we treated more women than men.**



### Distribution of Age Categories



66% **Non-Hispanic Black**  
 09% **Hispanic**  
 19% **Non-Hispanic White**  
 06% **Other/Unknown**

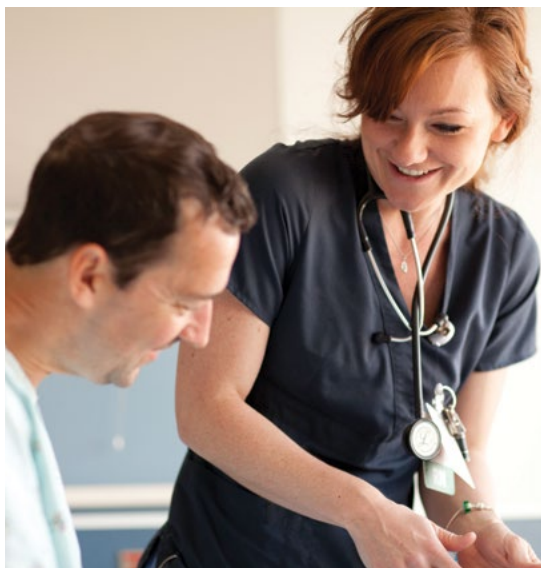
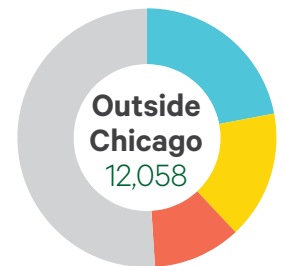
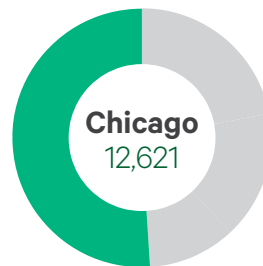
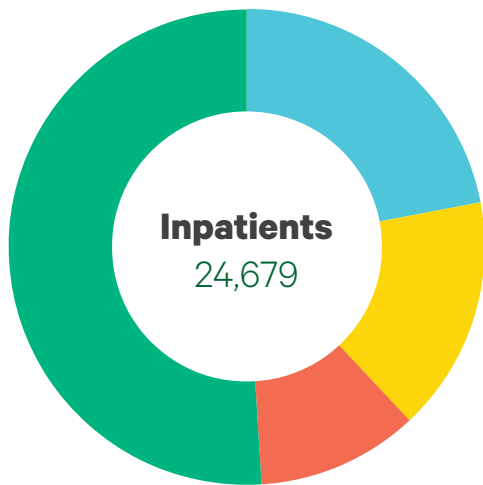




## Rush University Medical Center inpatients

About half of admitted inpatients lived in Chicago — mostly on the West and South sides — and half lived in suburban Cook County.

Patients from the West Side of Chicago accounted for 20 percent of total visits to Rush University Medical Center.



### Chicago Communities

West Side	4,768
Southwest Side	1,593
South Side	1,491
Far Southeast Side	957
North Side	925
Far North Side	909
Far Southwest Side	745
Northwest Side	659
Loop	574

### Top 5 of 86 Suburbs

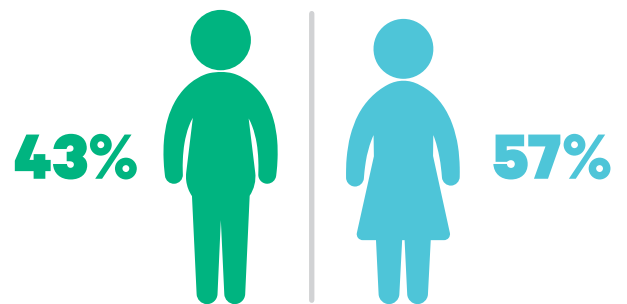
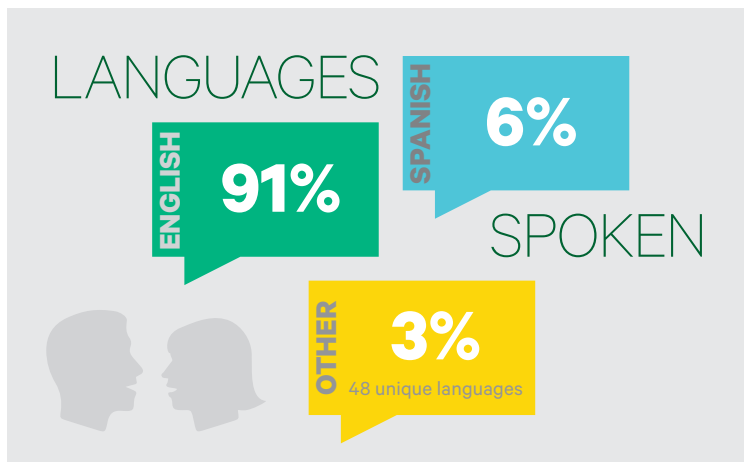
Oak Park	472
Cicero	270
Berwyn	205
Chicago Heights	175
Elmwood Park	170

### Top 5 Neighboring Counties

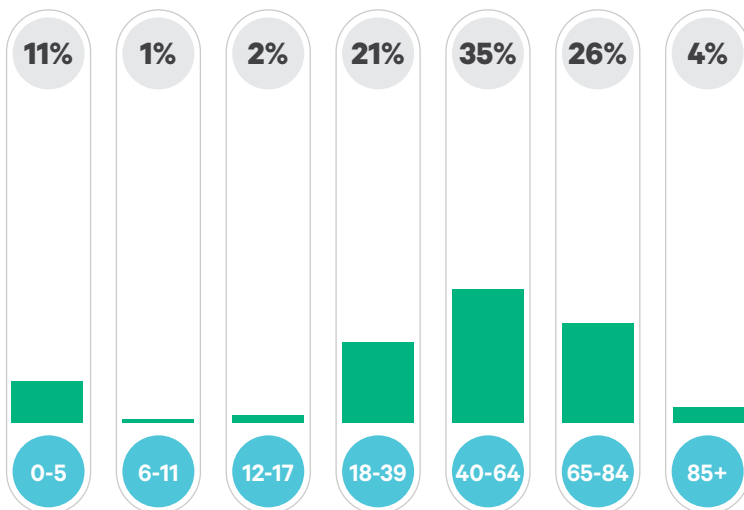
Dupage	1,186
Will	1,026
Lake	560
Kane	413
McHenry	333
Other Counties	2,782



**Most inpatients were adult English speakers, and we admitted more women than men. The largest group of patients was non-Hispanic whites.**



### Distribution of Age Categories

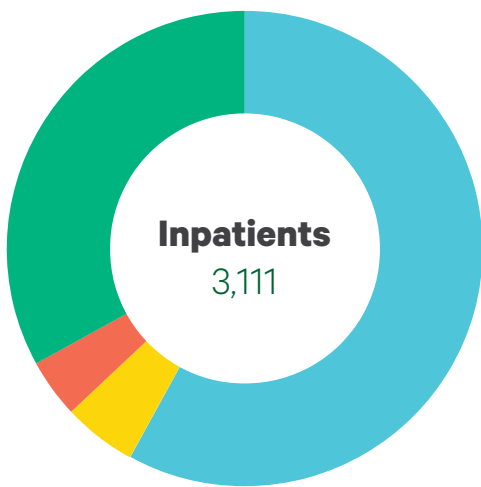


32% **Non-Hispanic Black**  
 17% **Hispanic**  
 43% **Non-Hispanic White**  
 08% **Other/Unknown**



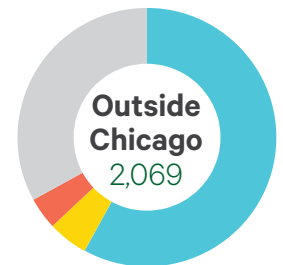
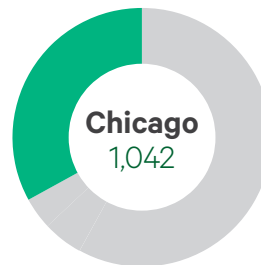
## Rush Oak Park Hospital inpatients

These inpatients lived mainly in suburban Cook County; those who lived in Chicago were mostly from the West Side.



Data drives us toward medical decision-making that supports the health of our patients. But data that includes the social determinants of health drives us toward medical decision-making that supports the health of our communities.

**Michael Hanak, MD, FAAFP**  
Associate Chief Medical Informatics Officer  
Rush University Medical Center  
  
Associate Professor  
Rush University



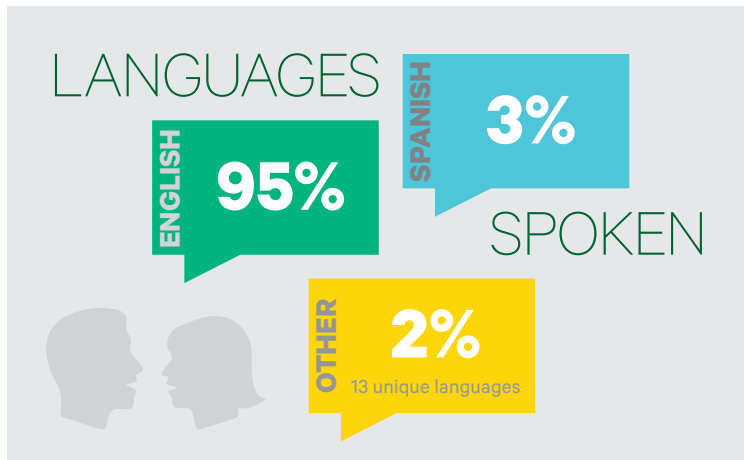
Chicago Communities	
West Side	716
Northwest Side	119
South, Far Southeast, Far Southwest Sides	60
Southwest Side	55
North Side/Loop	51
Far North Side	41

Top 5 of 65 Suburbs	
Oak Park	731
Forest Park	215
Berwyn	164
Elmwood Park	120
River Forest	96
Top Neighboring Counties	
Dupage	78
Will	29
Other Counties	134

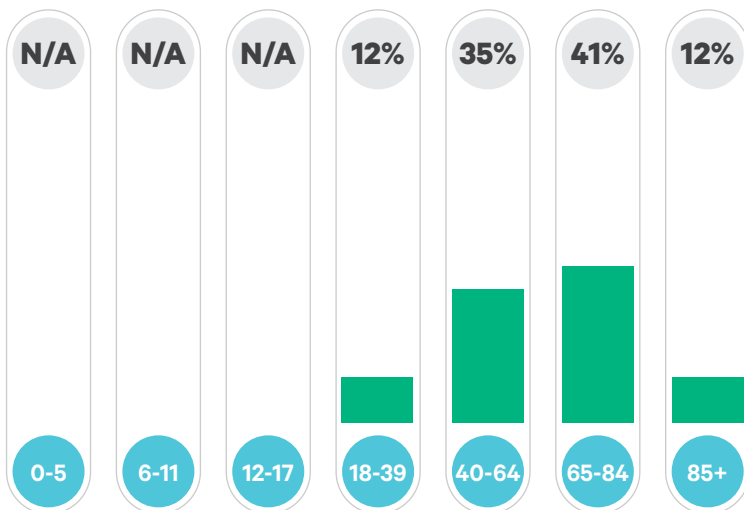




**All inpatients were adults (Rush Oak Park Hospital doesn't treat pediatric inpatients), and most spoke English. We treated more women than men, and about equal percentages of non-Hispanic blacks and non-Hispanic whites.**



### Distribution of Age Categories

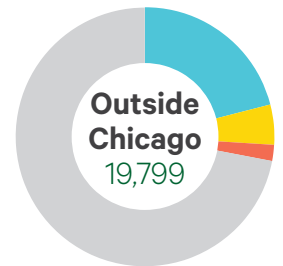
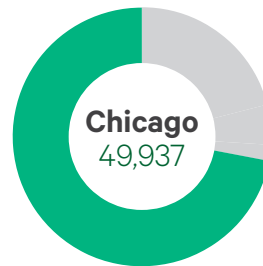
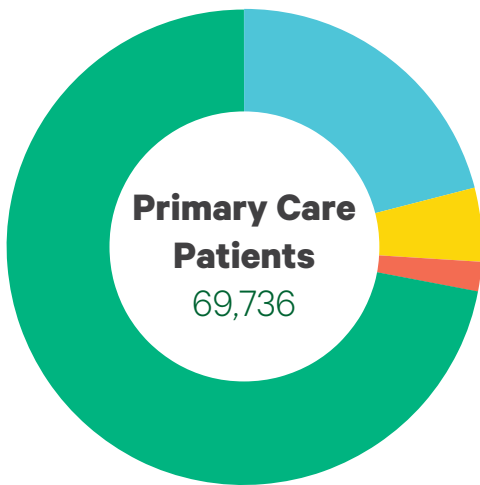


45% **Non-Hispanic Black**  
 08% **Hispanic**  
 43% **Non-Hispanic White**  
 04% **Other/Unknown**



## Rush University Medical Group primary care patients

Rush operates several widely scattered primary care clinics, so patients completing at least one primary care visit came from a much wider geographic range than inpatients and emergency department patients.



### Chicago Communities

West Side	17,462
North Side	6,587
South Side	5,653
Southwest Side	5,121
Far North Side	3,668
Loop	3,465
Far Southeast Side	2,968
Far Southwest Side	2,648
Northwest Side	2,365

### Top 5 of 87 Suburbs

Oak Park	1,922
Berwyn	798
Cicero	740
Oak Lawn	525
Elmwood Park	476

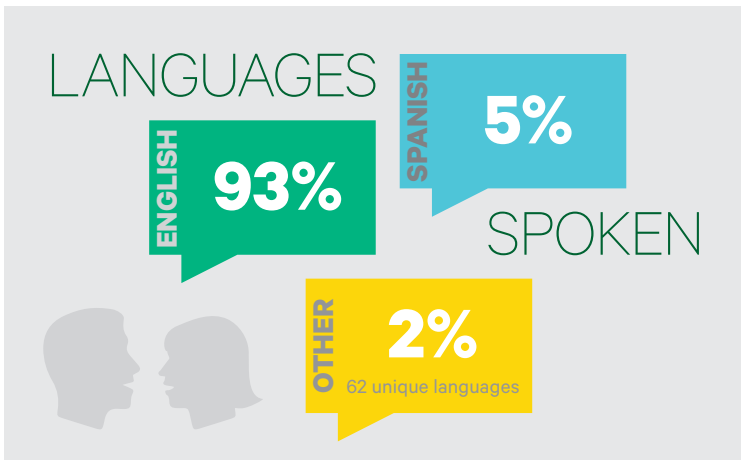
### Top 5 Neighboring Counties

Dupage	1,592
Will	1,045
Lake	479
Kane	239
McHenry	161

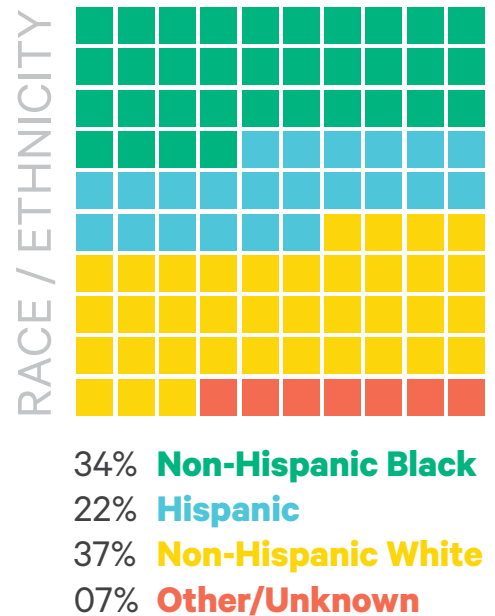
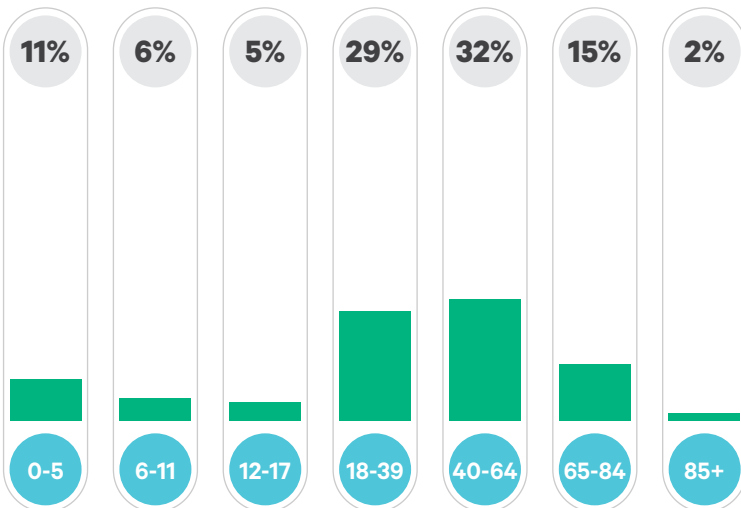
Other Counties	1,787
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**Most primary care patients were women, and most spoke English. Non-Hispanic white and black patients were each about one-third of the patient population.**



### Distribution of Age Categories

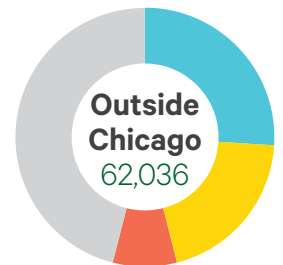
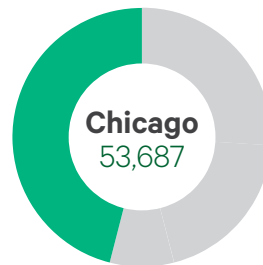
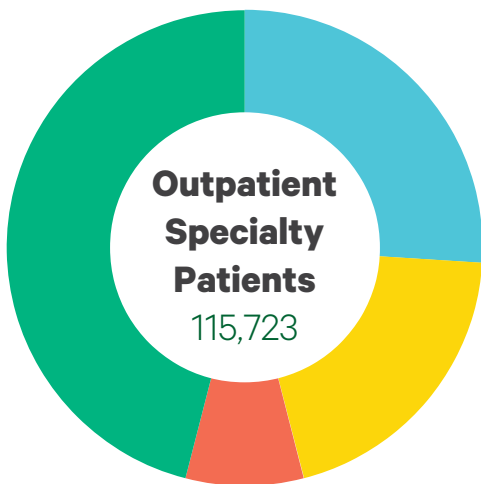






## Rush University Medical Group outpatient specialty patients

Most of the patients who made at least one office visit to an outpatient specialty department came from suburban Cook County; within Chicago, most came from the West Side.



### Chicago Communities

West Side	16,417
South Side	6,404
North Side	6,319
Southwest Side	5,475
Far North Side	4,966
Loop	4,196
Far Southeast Side	3,573
Far Southwest Side	3,339
Northwest Side	2,998

### Top 5 of 86 Suburbs

Oak Park	3,816
Berwyn	1,350
Cicero	1,098
Elmwood Park	997
Orland Park	991

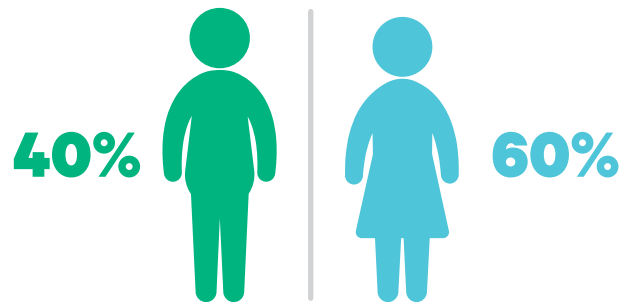
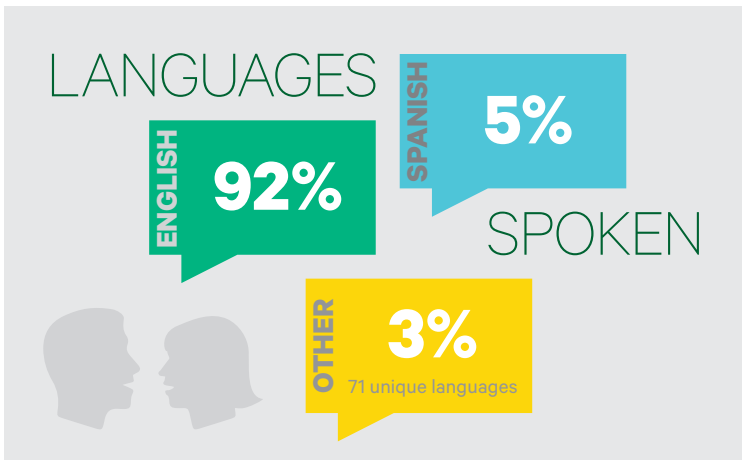
### Top 5 Neighboring Counties

Dupage	9,022
Will	4,763
Lake	3,550
Kane	2,243
McHenry	1,509

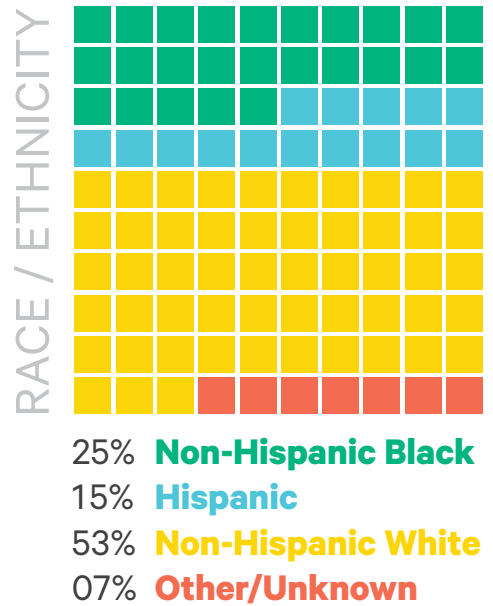
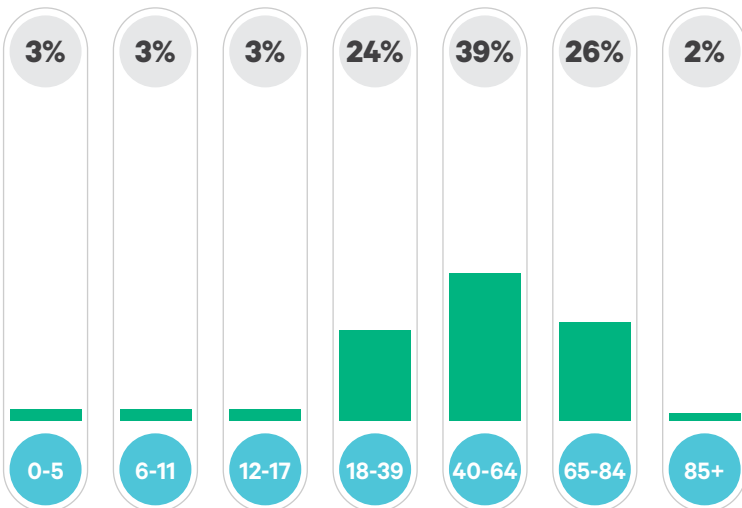
Other Counties	9,451
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**We treated mostly adults, and more women than men. Most patients spoke English, and more than half were non-Hispanic whites.**



### Distribution of Age Categories



# Where are the equity gaps?

Once we had a clear picture of who Rush patients are, we could look at how we serve patients of different ages, races and sexes. We looked at readmissions, quality metrics and patient satisfaction.



## Readmissions

One way to measure quality of care is to track how many patients are readmitted to the hospital within 30 days after they're discharged.

At **Rush University Medical Center**, patients of different ages, races and sexes had different readmission rates.



Older patients were more likely to be readmitted. An older patient is **1.7 percent more likely** to be readmitted than a patient who is one year younger.



Male patients were **13.7 percent more likely** than female patients to be readmitted.

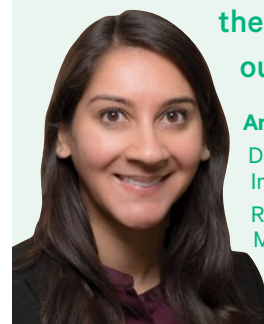
Non-Hispanic black patients were **63.5 percent more likely** than non-Hispanic white patients to be readmitted.

Hispanic patients were **55.4 percent more likely** than non-Hispanic white patients to be readmitted.

At **Rush Oak Park Hospital**, we didn't see any significant readmission differences between racial/ethnic groups.



For years, Rush has tracked and improved quality measures, driven both by external data-reporting requirements and our internal work to identify performance improvement opportunities. Now, it's time for us to look at these measures through the lens of equity to find ways to narrow the quality gaps among the diverse populations we serve. Rush's promise to all of our patients is quality care and the best health outcomes.



**Anisa Jivani, MHA**  
Director of Quality Improvement  
Rush University Medical Center





## Quality metrics

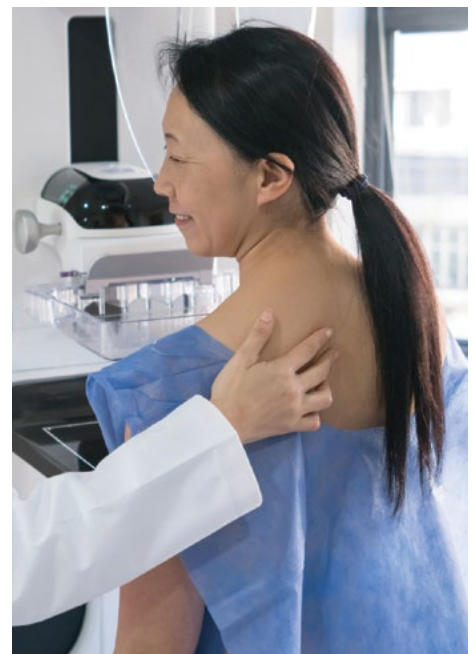
This data tracks patients who visited Rush University Medical Group primary care clinics in 2017. Although we measure many more factors, we chose to highlight these because they represent well-known health disparities among a range of age groups.



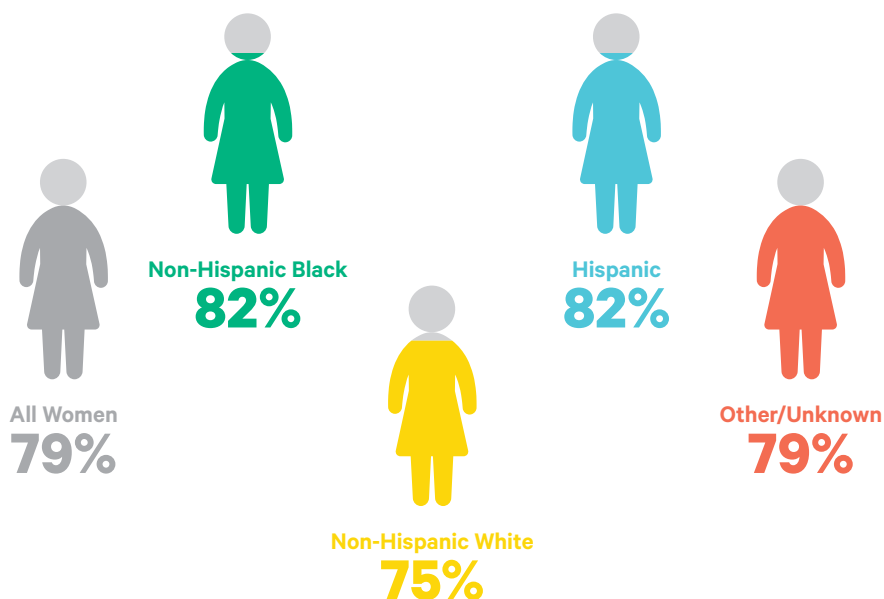
## Breast cancer screening

Black and Hispanic women in the U.S. die of breast cancer at higher rates than white women, partly because inequities in screening result in later diagnoses for black women.

Rush performed screening mammograms on 79 percent of female patients between the ages of 50 and 74. Some may have been screened elsewhere, which is not reflected in this data.



At Rush, non-Hispanic black women and Hispanic women were **more likely** to have mammograms than non-Hispanic white women.

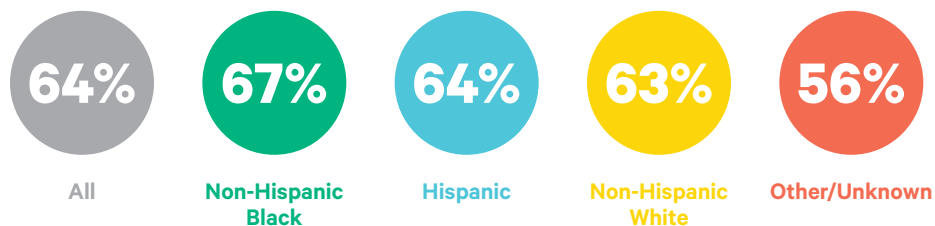


# Black patients in the U.S. tend to get screened for colorectal cancer less than other groups — but not at Rush.



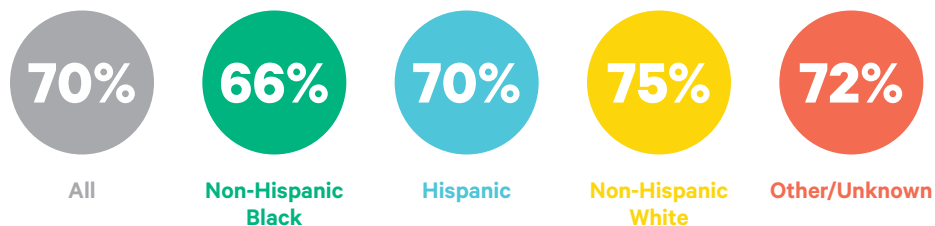
## Colorectal cancer screening

Black patients in the U.S. tend to get screened for colorectal cancer less than other groups, which can mean that they are diagnosed later and have worse outcomes. However, at Rush, we actually screened slightly *more* non-Hispanic black patients than non-Hispanic white patients.



## Well-controlled high blood pressure

Seventy-five percent of non-Hispanic white patients did a good job of controlling their high blood pressure, compared to 66 percent of non-Hispanic black patients and 70 percent of Hispanic patients.

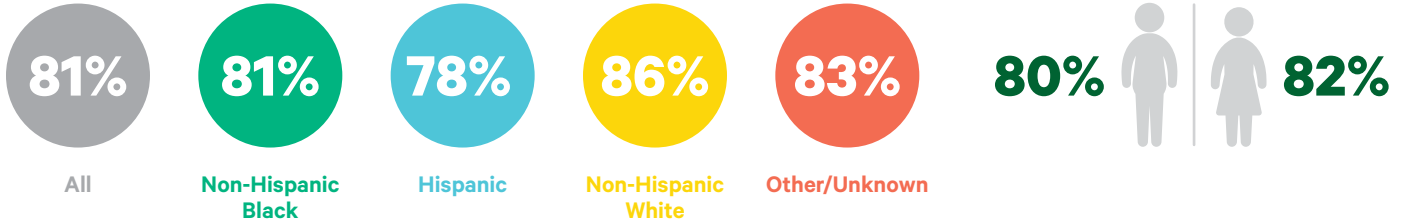


Men and women controlled their blood pressure equally well.



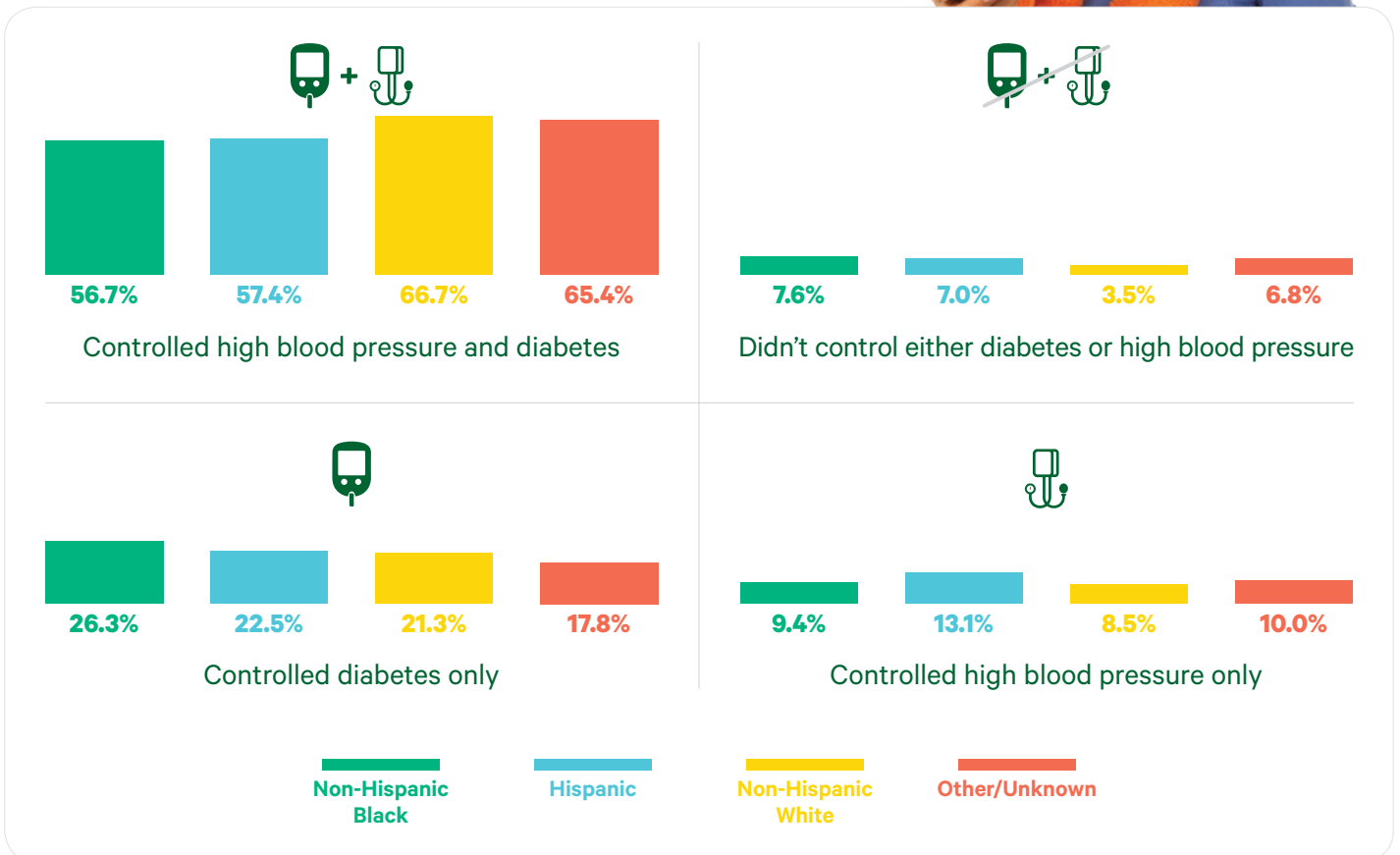
## Well-controlled diabetes\*

Eighty-six percent of non-Hispanic white patients did a good job of controlling their diabetes, compared to 81 percent of non-Hispanic black patients and 78 percent of Hispanic patients.



## + Diabetes + high blood pressure both well-controlled

Among Rush patients who had both high blood pressure and diabetes, non-Hispanic white patients were most likely to keep both conditions under control. Some patients kept one of their conditions under control. In those cases, non-Hispanic black patients were best at controlling their diabetes, and Hispanic patients did the best at controlling their blood pressure.



\*This data does not reflect how severe patients' symptoms are.





**Overall, Rush patients were more satisfied than the national average.**

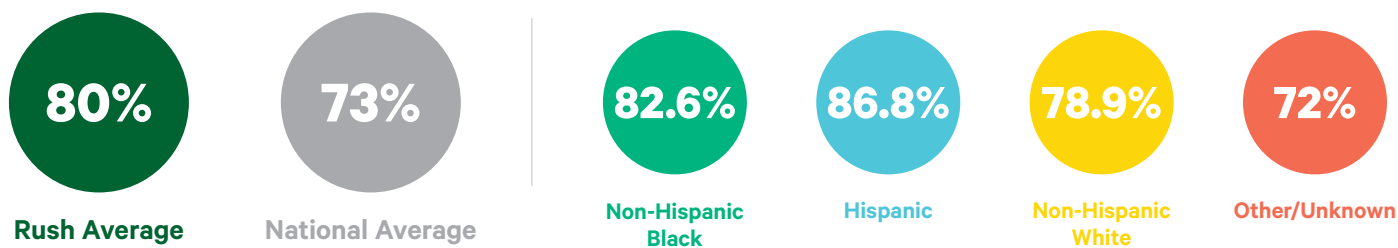


## Patient experience

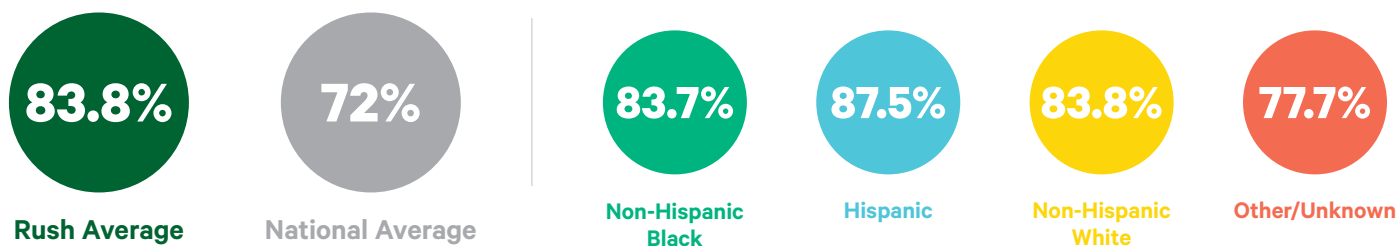
The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey measures patients' satisfaction with their hospital stays. Overall, Rush patients were more satisfied than the national average; the data below shows the percentage of patients who gave Rush the highest possible scores.

Hispanic patients were likelier than other groups to give us a high rating, while patients of other or unknown race were least likely to rate Rush highly. Non-Hispanic black patients were more likely than non-Hispanic white patients to give us a high overall hospital rating, and non-Hispanic black and white patients were equally willing to recommend Rush.

### Overall hospital rating

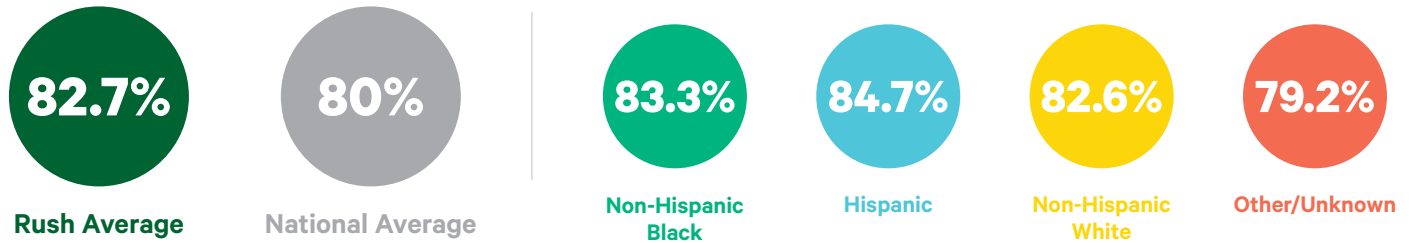


### Recommend the hospital

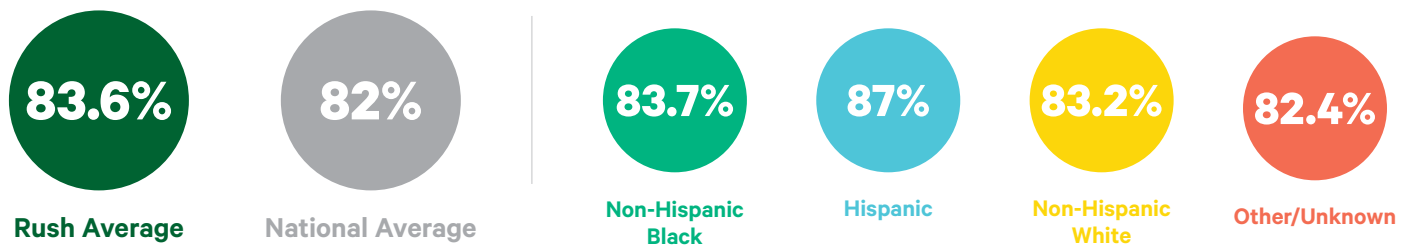


Most patients rated Rush's nurse and doctor communication as better than the national average. Hispanic patients were most likely to give us top marks, and patients of other or unknown race were least likely to rate us highly.

### Nurse communication

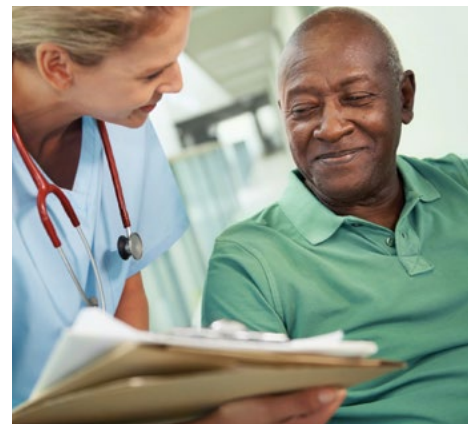


### Doctor communication

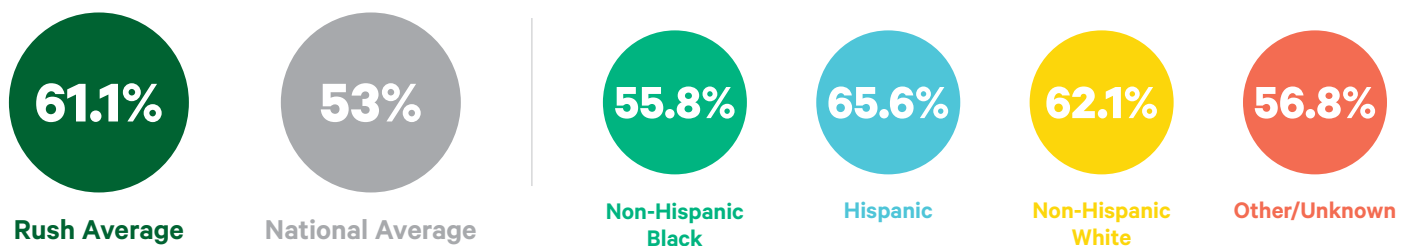


### Our biggest improvement opportunity is in care transitions.

Our biggest improvement opportunity is in care transitions — the times when patients move from place to place, such as from the hospital to a rehab center. We received lower than average ratings from non-Hispanic black patients and those of other or unknown race.



### Care transitions



# How do Rush patients reflect national public health trends?

Our numbers are similar to those of general U.S. health patterns.

As we analyzed data on inpatients and emergency department patients, we identified three issues that often bring patients to Rush and also reflect well-known health disparities among racial and ethnic groups in the U.S: **Pregnancy and delivery complications, children’s respiratory health** and **cardiovascular health**.

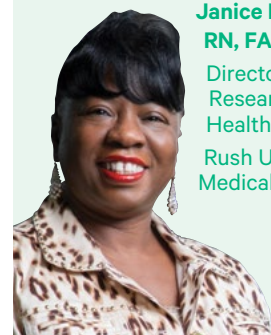
The disparities we saw at Rush match those that occur in Chicago and in the U.S. overall. This indicates that the differences aren’t due to people getting unequal care at Rush, but to societal-level differences in health outcomes that are linked to many different factors.

We know our analysis has limitations; for example, body-mass index (BMI) isn’t part of our data, but can affect relationships between conditions like diabetes and high blood pressure. And because our data reflects ZIP codes but one ZIP code can include multiple neighborhoods, we can’t break down our data into specific neighborhoods.

Many disparities are related to social determinants of health such as access to good schools and jobs, healthy food, stable housing, reliable transportation and safe neighborhoods. The annual Rush Community Benefits Summary, available at [rush.edu/about-us/rush-community/road-maps-and-reports](http://rush.edu/about-us/rush-community/road-maps-and-reports), shows some of the ways we’re working to make sure our communities have the resources they need to be healthier.



Looking at patient care through a health equity lens means bridging the gap between where people come from and how we see them when they come through the doors at Rush. Considering disparities sensitizes us to the real circumstances of people’s lives, and ensures that we build nursing interventions with the social determinants of health in mind — addressing the needs that have to be addressed in order to achieve good health.



**Janice Phillips, PhD, RN, FAAN**  
Director of Nursing Research and Health Equity  
Rush University Medical Center





## Pregnancy and delivery complications

Many women who come to Rush with pregnancy complications come from the mostly black and Hispanic communities around our Chicago campus, but we're more likely to see black women for these complications than women of other racial/ethnic groups. According to the Agency for Healthcare Research and Quality, even though black mothers in the U.S. tend to be younger than white mothers, they have higher rates of complications.\* It's important to note that Rush is a Level 3 perinatal hospital that accepts emergency OB transfers, so we receive patients with major complications that other hospitals aren't equipped to treat.

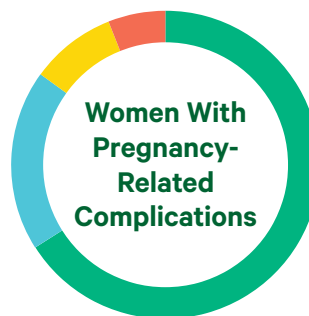
### Rush emergency department visits by women of childbearing age

Pregnancy-related complications were some of the most common reasons that brought women of childbearing age to the Rush emergency department in 2017. The number of non-Hispanic black women with these complications was particularly high, consistent with the general U.S. pattern.

We identified pregnancy-related complications as an issue to discuss in this report because it's one of the **most common** reasons for women of childbearing age to visit the Rush emergency department, and the number of black women we saw with these complications was **particularly high**.



58% **Non-Hispanic Black**  
 18% **Hispanic**  
 17% **Non-Hispanic White**  
 07% **Other/Unknown**



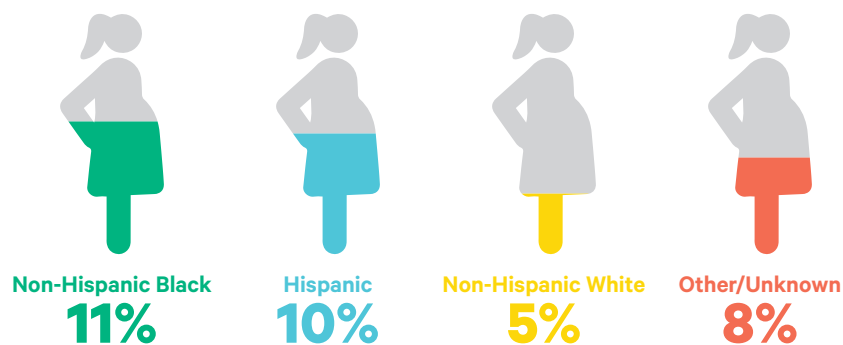
66% **Non-Hispanic Black**  
 19% **Hispanic**  
 09% **Non-Hispanic White**  
 06% **Other/Unknown**

\*AHRQ, 2018. "Trends and Disparities in Delivery Hospitalizations Involving Severe Maternal Morbidity, 2006–2015." [www.hcup-us.ahrq.gov/reports/statbriefs/sb243-Severe-Maternal-Morbidity-Delivery-Trends-Disparities.jsp](http://www.hcup-us.ahrq.gov/reports/statbriefs/sb243-Severe-Maternal-Morbidity-Delivery-Trends-Disparities.jsp)



## Rush emergency department pregnancy-related complications\*

Non-Hispanic black women and Hispanic women who visited Rush emergency departments had twice the odds of visiting for pregnancy-related complications as non-Hispanic white women.



We don't yet fully understand why pregnancy-related complications exist at a higher rate for non-Hispanic black women. What we do know is that at Rush, we are committed to delivering the highest quality care to all of our mothers and babies, and are equally committed to studying and better understanding the issues surrounding these disparities. As we work together with our community and patients, I am confident that Rush can have a significant impact on this challenge for the patients we serve.

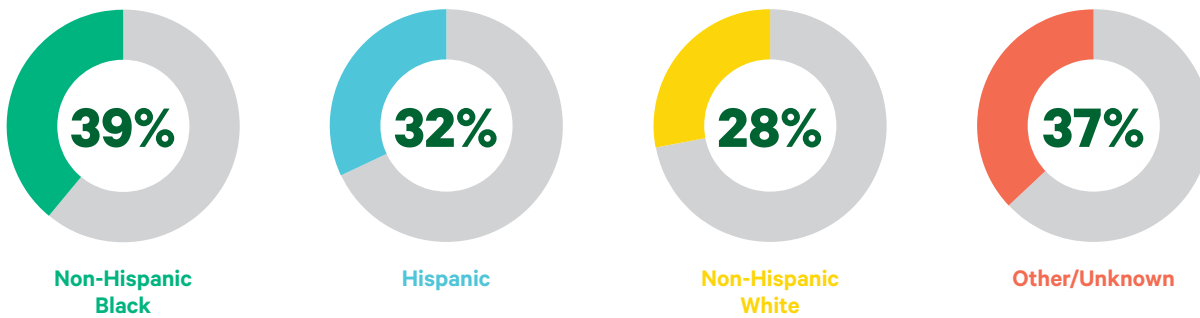


**Cynthia Barginere,**  
DNP, RN, FACHE  
Senior VP and Chief  
Operating Officer  
Rush University  
Medical Center

\*Data adjusted by age.

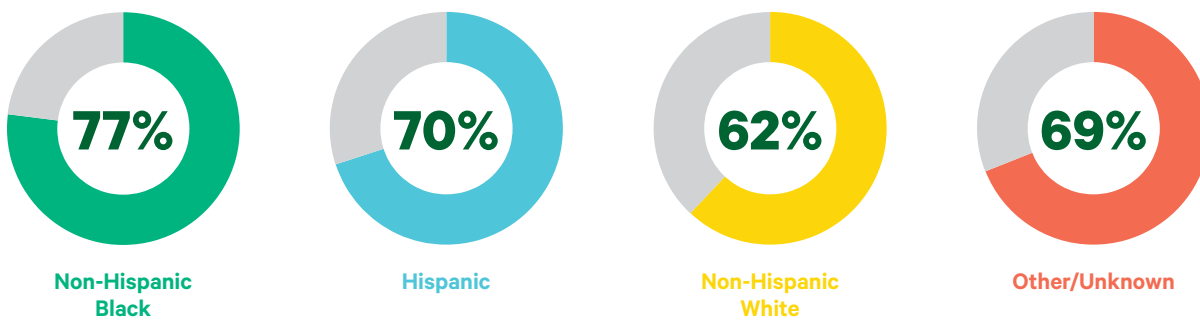
## Vaginal delivery complications at Rush\*

Non-Hispanic black women who gave birth at Rush University Medical Center had 1.7 times the odds of having a complication compared to non-Hispanic white women.



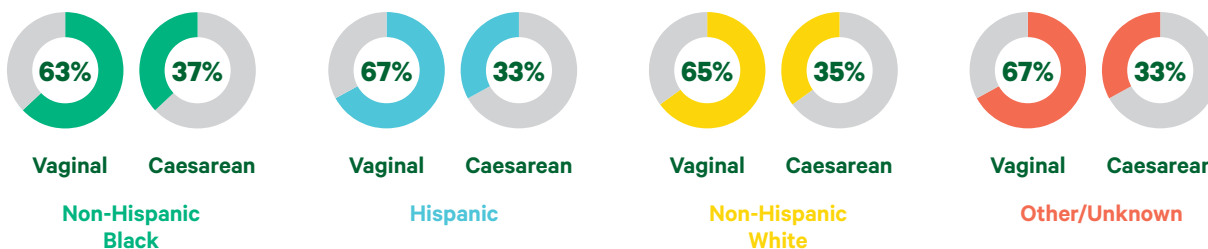
## Caesarean deliveries with complications at Rush\*

Non-Hispanic black women who gave birth at Rush University Medical Center had twice the odds of having a complication as non-Hispanic white women.



## Vaginal delivery vs. caesarean delivery rates by race at Rush

While studies show that non-white women in the U.S. are more likely to have C-section deliveries, at Rush we saw no racial differences.



\*Data is based on Rush birth hospitalization diagnostic-related groups (DRGs) and adjusted for age.





## Children's respiratory health

Research shows that non-Hispanic black children in the U.S. are more likely to live in neighborhoods with more residential allergens and pollution, and to have higher stress levels because of more violence and poverty. Both contribute to a higher prevalence of asthma and respiratory illnesses.

Nationwide, according to the Environmental Protection Agency, asthma prevalence is about twice as high among non-Hispanic black children compared to non-Hispanic white children. In Chicago, the Respiratory Health Association says that the 2015 rate of asthma-related emergency department visits by non-Hispanic black children was about five times higher than that of non-Hispanic white children. For a map of asthma prevalence among children in Chicago, see [rush.edu/HealthEquityResources](http://rush.edu/HealthEquityResources).

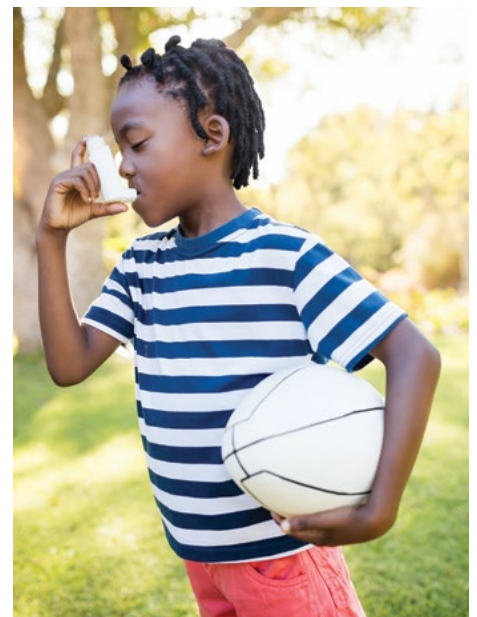
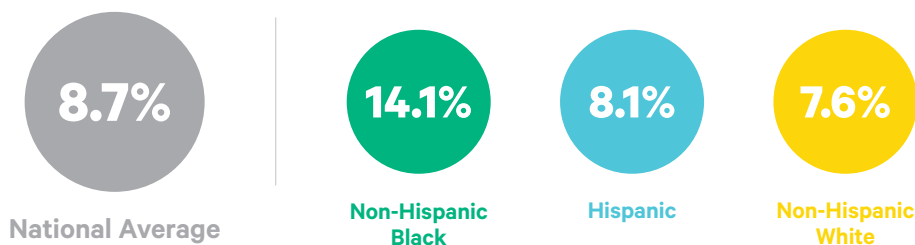
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Nationwide, according to the EPA, asthma prevalence is about **twice as high** among non-Hispanic black children compared to non-Hispanic white children.

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### Asthma prevalence among children in the U.S.\*

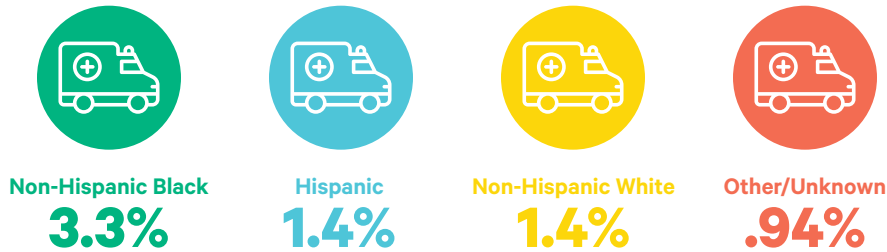
Non-Hispanic black children in the U.S. are almost twice as likely to have asthma as non-Hispanic white children.



\*Environmental Protection Agency, 2017. "ACE: Health—Respiratory Diseases." [www.epa.gov/ace/ace-health-respiratory-diseases](http://www.epa.gov/ace/ace-health-respiratory-diseases).

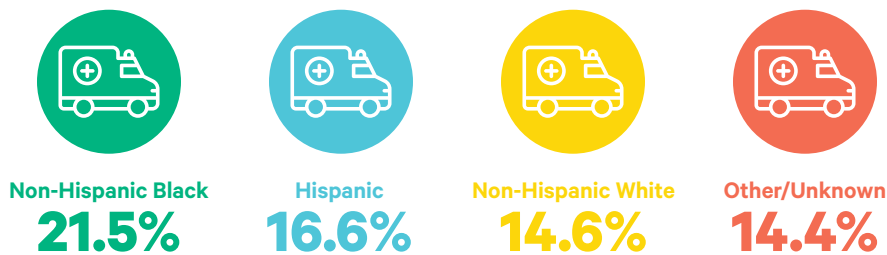
## Rush emergency department asthma visits by children\*

Among children who visited Rush emergency departments, non-Hispanic black children were 2.5 times more likely to be there for asthma than non-Hispanic white children.



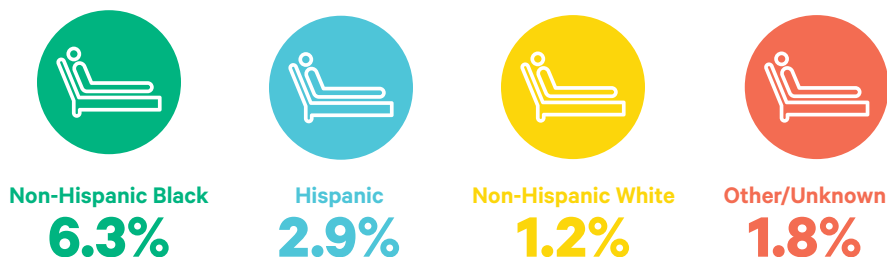
## Rush emergency department visits by children for respiratory infection\*

Non-Hispanic black children who visited our emergency departments were 1.5 times more likely to be there for respiratory infections than non-Hispanic white children.



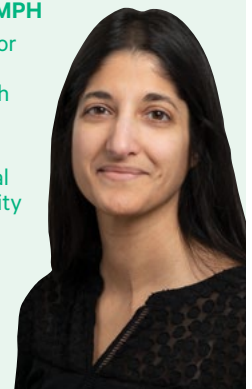
## Inpatient bronchitis/asthma stays\*

Among children who were hospitalized at Rush, non-Hispanic black children were 5.8 times more likely to be admitted for respiratory infections than non-Hispanic white children.



According to Respiratory Health Association data, 63 percent of children in Chicago who visited the emergency department for asthma in 2015 were black, 22 percent were Hispanic and 6 percent were white. At Rush in 2017, 80 percent of children making asthma-related visits were black, 14 percent were Hispanic and 4 percent were white. It's clear that the communities we serve bear a disproportionate amount of this citywide disparity — and that we are both well situated and fully obligated to address its root causes.

**Gina Lowell MD, MPH**  
 Assistant Professor  
 and Director of  
 Community Health  
 for Pediatrics  
 Rush University  
 Children's Hospital  
 and Rush University  
 Medical Center



\*Data adjusted by age and gender.



## Cardiovascular health

Cardiovascular health is a special concern for non-Hispanic black adults, who are more likely to have conditions such as diabetes and hypertension that contribute to poor cardiovascular health.

**In Chicago, compared to non-Hispanic white adults, non-Hispanic black adults are:**

**40%** more likely to have **high blood pressure** than non-Hispanic white adults

**2X** as likely to be diagnosed with **diabetes** as non-Hispanic white adults

A potential contributing factor: More than half of the people who lack health insurance are non-white.

**And far more black people die of heart disease than white people in Chicago:**

Per 100,000 adults, **262.2** non-Hispanic black adults die of **heart disease**, compared to **194.7** non-Hispanic whites.\*

\*Data adjusted by age.



Recent data points to lifestyle choices, particularly nutrition, as key factors in the development of hypertension, diabetes, stroke, heart disease and premature death in African-Americans. At Rush, we focus on meeting the patient where they are in the quest to change these factors. We like to say that we are not just “mopping up the floor” with cutting-edge treatments and procedures after the complications set in. Instead, we are turning off the overflowing faucet — changing the outcomes by preventing these events before they occur.

**Kim A. Williams Sr., MD, MACC, FAHA, MASNC, FESC**

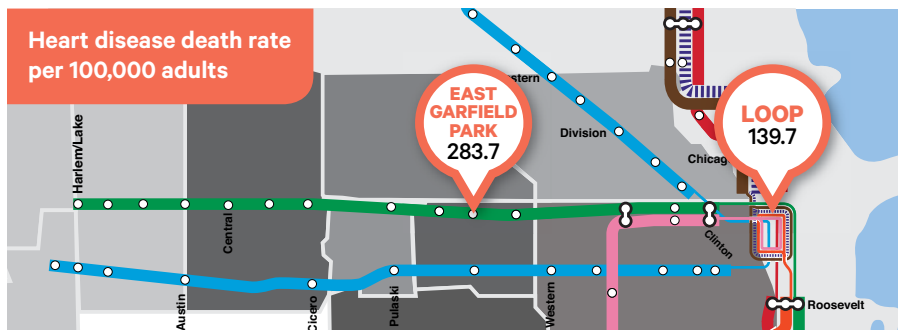
Chief, Division of Cardiology  
Rush University  
Medical Center

James B. Herrick,  
MD, Professor of  
Heart Research,  
Rush University





In Chicago's affluent downtown Loop, the heart disease death rate is 139.7 per 100,000. Just a few miles west, in the East Garfield Park neighborhood not far from the Rush campus, the rate is more than double: 283.7.



### Emergency department visits for heart disease\*

We didn't see a significant difference in the numbers of non-Hispanic black adults and non-Hispanic white adults who visited the Rush University Medical Center and Rush Oak Park Hospital emergency departments for heart disease. For a map of where these patients live, see [rush.edu/HealthEquityResources](http://rush.edu/HealthEquityResources).



Non-Hispanic Black  
**8.6%**



Hispanic  
**7.8%**



Non-Hispanic White  
**7.3%**



Other/Unknown  
**6.6%**

### Inpatient visits for heart failure\*

Our inpatient data for heart failure shows a much bigger racial/ethnic gap. Non-Hispanic black adults were more than three times as likely to be hospitalized at Rush for heart failure than non-Hispanic white adults.



Non-Hispanic Black  
**4.7%**



Hispanic  
**1.9%**



Non-Hispanic White  
**1.5%**



Other/Unknown  
**1.4%**

Non-Hispanic black adults were more than **3X** as likely to be hospitalized at Rush for heart failure than non-Hispanic white adults.

\*Data adjusted by age and gender.

## What's next?

Keep thinking about health equity at Rush — and share your thoughts about how we can do better.

### Where to learn more

We've collected a number of resources that you can use to learn more about health equity. Go to [rush.edu/HealthEquityResources](http://rush.edu/HealthEquityResources) to find the following:

#### Further information about health equity nationwide and in Chicago:

The Robert Wood Johnson Foundation report on health equity

Videos from the Institute for Healthcare Improvement

The citywide public health plan Healthy Chicago 2.0

The Metropolitan Planning Council's report on the cost of segregation in Chicago

#### More information about how we created this report on health equity at Rush:

Project operationalization details

Definitions

Methods information

Maps that show where Rush patients live and other information

### Questions to consider

How can we expand conversations around health equity across the Rush System?

Rush serves a diverse patient population, many of whom come from highly segregated communities coping with major economic hardship and considerable health disparities. How can Rush help to eliminate health disparities in our neighboring communities?

How can we expand programs that link medical care and community health?



## Report Development

### **David Ansell, MD, MPH**

Senior Vice President for Community Health Equity, Rush University Medical Center  
Associate Provost for Community Affairs, Rush University

### **Brittney Lange-Maia, PhD, MPH**

Assistant Professor, Department of Preventive Medicine, Rush University  
Affiliated Faculty, Center for Community Health Equity

### **Eric Yang, MPH**

Statistician, Center for Community Health Equity and Rush University Medical Center

### **Chandrea Brown, MS**

Information Services Project Leader, Data Services & Knowledge Management, Rush University Medical Center

### **Elizabeth Avery, MPH**

Statistician, Rush Department of Preventive Medicine and Center for Community Health Equity

### **Elizabeth Lynch, PhD**

Associate Professor, Department of Preventive Medicine, Rush University  
Affiliated Faculty, Center for Community Health Equity

## Contributors

### **Cynthia Barginere, DNP, RN, FACHE**

Senior Vice President and Chief Operating Officer, Rush University Hospital

### **Michael Hanak, MD, FAAFP**

Associate Chief Medical Informatics Officer, Rush University Medical Center  
Associate Professor, Rush University

### **Anisa Jivani, MHSA**

Director of Quality Improvement, Rush University Medical Center

### **Nikki Hopewell**

Senior Content Strategist, Rush University Medical Center

### **Gina Lowell, MD, MPH**

Assistant Professor and Director of Community Health for Pediatrics, Rush University Children's Hospital and Rush University Medical Center

### **Marie Mahoney**

Senior Director, Web and Marketing and Communications, Rush University Medical Center

### **Nousheen Meherally, MPH**

Performance Improvement Consultant, Quality Improvement, Rush University Medical Center

### **Christopher Nolan, MPA**

System Manager, Community Health and Benefit, Rush System for Health

### **Janice Phillips, PhD, RN, FAAN**

Director of Nursing Research and Health Equity, Rush University Medical Center

### **Raj C. Shah, MD**

Co-director, Center for Community Health Equity  
Associate Professor, Department of Family Medicine and Rush Alzheimer's Disease Center, Rush Medical College

### **Rachel E. Start, RN, MSN**

Director, Ambulatory Nursing, Nursing Practice and Magnet Performance, Rush Oak Park Hospital

### **Kim A. Williams Sr., MD, MACC, FAHA, MASNC, FESC**

Chief, Division of Cardiology, Rush University Medical Center  
James B. Herrick, MD, Professor of Heart Research, Rush University

### **Rush Bioinformatics and Biostatistics Core**

## Design and Writing

### **Patty Stevenson**

Graphic designer

### **Colleen Frankhart**

Writer/editor





Excellence is just the beginning.