UTHealth
The University of Texas Health Science Center at Tyler

Severe Maternal Morbidity in Communities Across Texas

Data Summary & Documentation

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Link to online story map

INTRODUCTION

For many women, pregnancy is a time of excitement and joy, resulting in a healthy new addition to the family. For others, however, pregnancies or deliveries may result in moderate complications, life-threatening events, or even death (Figure 1) [1]. Maternal health and safety in Texas has been the subject of substantial public discussion and legislative attention since a 2016 study in Obstetrics & Gynecology found that Texas' maternal mortality rate had more than doubled between 2011 and 2012, resulting in an overall increase that was substantially higher than the national average [2, 3].

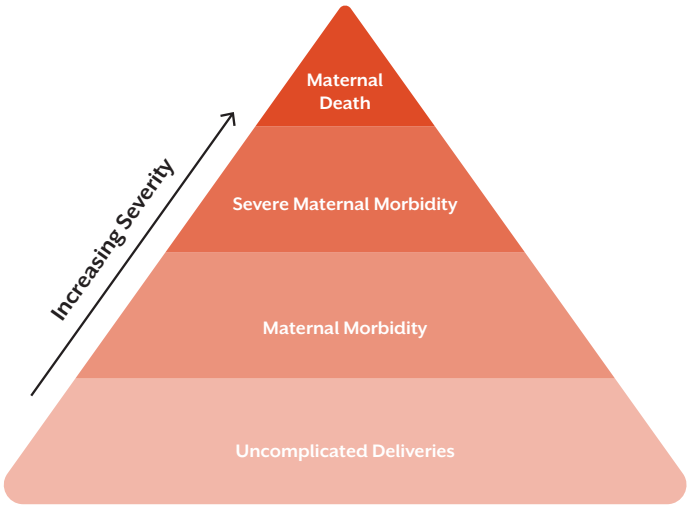

Figure 1. Continuum of maternal outcomes
Source: New York City Department of Health and Mental Hygiene (2016). Severe Maternal Morbidity in New York City, 2008-2012. New York, NY.

Subsequent analysis discovered that many deaths that had been identified on death certificates as maternal deaths were in fact miscoded, inflating the numbers [4]. Using an enhanced method which involved in-depth case reviews, the maternal mortality ratio in Texas in 2012 was less than half that obtained using the standard method [4].

Both the controversy and the correction, however, brought attention to several important aspects of maternal health and safety in Texas. The collection and analysis of data surrounding maternal death has not been as accurate, comprehensive, or targeted as it could be. More

importantly, racial/ethnic disparities still exist in maternal mortality and the majority of these deaths are potentially preventable.

The United States has the highest rate of maternal mortality among developed nations [5], with about 18.0 maternal deaths per 100,000 live births [6]. But even at these relatively high rates, maternal mortality is too rare a statistical event to map meaningfully. Severe maternal morbidity, however, is an unfortunately common occurrence. For every maternal death in the U.S., about 100 women experience severe maternal morbidity [7].

In 2013-2014, severe maternal morbidity affected more than 50,000 women in the U.S. (approximately 14.4 per 1,000 deliveries) [8]. Texas has approximately 400,000 births annually, accounting for 10% of all births in the U.S [9]. Thus, maternal health outcomes in Texas has national implications. According to a recent report, the severe maternal morbidity rate in Texas in 2015 was 19.7 per 1,000 deliveries [10].

This analysis of severe maternal morbidity rates in Texas, and the large and small area maps that accompany it, are intended to improve the quantity and quality of information on a critical indicator of maternal health and safety in Texas. The hope is that these maps can inform policies and resource allocation at the state and local level, guide further research, and ultimately, help strengthen the design and evaluation of interventions to meet specific community needs.

What is severe maternal morbidity?

Severe maternal morbidity refers to unexpected outcomes of labor and delivery resulting in significant short- or long-term consequences to a woman's health [11]. These conditions, which represent serious complications of labor and delivery, include disseminated intravascular coagulation, eclampsia, cardiac events, and many more. They also include procedures used to manage these serious conditions, such as blood transfusion and hysterectomy [8]. A complete list of conditions is available in the technical notes section.

Severe maternal morbidity often results in extended length of hospitalization and the need for long-term rehabilitation [12]. Hospital costs for deliveries with any severe maternal morbidity are two times higher than those without [13]. Severe maternal morbidity is also an important indicator of health within a community. What affects a mother also affects the people she is surrounded by and the community in which she lives [14].

As with maternal mortality [15], there are substantial racial/ethnic disparities in the occurrence of severe maternal morbidity. Rates are 2.1 times higher in non-Hispanic black women and 1.3 times higher among Hispanic women when compared to non-Hispanic white women [7].

A substantial proportion of severe maternal morbidity is potentially preventable, and thus can be targeted as a means of preventing complications from labor and delivery and reducing the risk of maternal mortality [16]. Assessing variation in severe maternal morbidity at the local level (e.g., ZIP Code, county) will help to inform these prevention efforts.

Approach

This analysis used the 2011 through 2016 all-payer hospital discharge public use data file provided by the Texas Health Care Information Collection (THCIC) at the Center for Health Statistics, Texas Department of State Health Services (DSHS) [17]. Measures were calculated for those geographic areas (ZIP Codes, counties, and metropolitan areas) with at least 100 deliveries among women aged 15-49 years who were residents of Texas at the time of delivery. This report presents:

- The trend in severe maternal morbidity rate for Texas between 2011-2016, both overall and by race/ethnicity
- Severe maternal morbidity rates by urban/rural county designation, and at a large geographic level (metropolitan area) for each racial/ethnic group for 2016
- Severe maternal morbidity rates at small geographic levels (county and ZIP Code) for 2016
- Temporal variations in severe maternal morbidity rates at a small geographic level (ZIP Code) for 2014-2016

Trend in Severe Maternal Morbidity Rate, Overall and by Race/Ethnicity, Texas, 2011-2016

Between 2011 and 2016 in Texas, the overall rates of severe maternal morbidity have remained consistent, fluctuating between 17.0 per 1,000 deliveries at the low end and 19.9 per 1,000 deliveries at the high end (Figure 2). The variation within each racial/ethnic group over this six-year period, however, was significant.

There is also a significant variation in rates across racial/ethnic groups. In 2016, severe maternal morbidity rate was highest among non-Hispanic black women (23.8 per 1,000 deliveries), followed by Hispanic women (18.5 per 1,000 deliveries), and non-Hispanic white women (12.7 per 1,000 deliveries) (Figure 2).

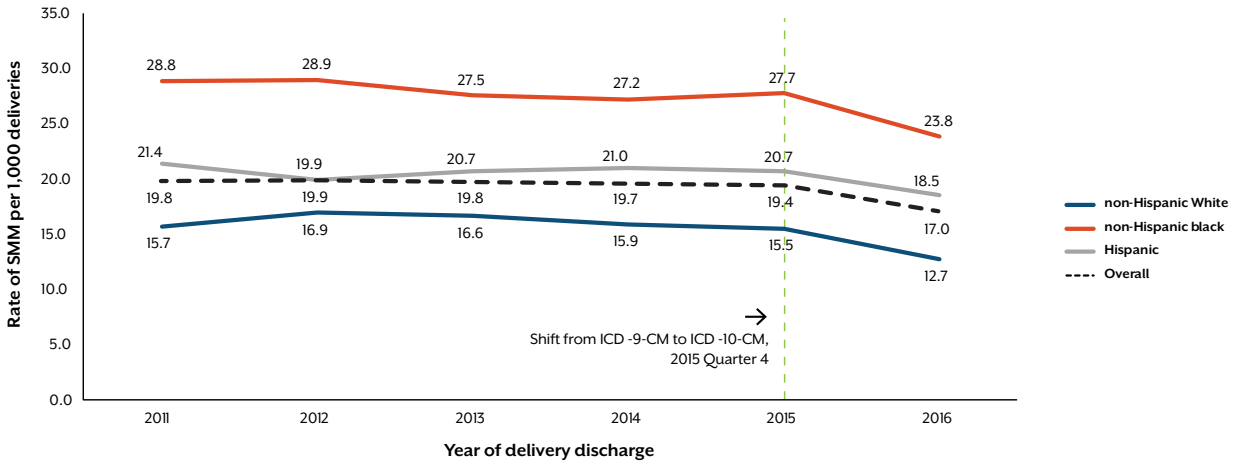

Figure 2. Trend in severe maternal morbidity rate, overall, and by race/ethnicity, Texas, 2011-2016
International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)
International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM)

Of note, the decrease in severe maternal morbidity rate observed in 2016 may not represent a true decrease but rather is reflective of the shift in coding from International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) to International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM). More details are available in the technical notes section.

Severe Maternal Morbidity Rate by Race/Ethnicity, Texas, 2016

Ideally, rates of severe maternal morbidity would be available for each racial/ethnic group at small geographic levels (e.g., county, ZIP Code). This is not possible, however, due to small number of deliveries for some racial/ethnic groups at the small geographic level. Therefore, to ensure data stability, severe maternal morbidity rate by race/ethnicity is reported at only large geographic levels (urban/rural and metropolitan area).

Racial/Ethnic Differences in Urban versus Rural Counties

In 2016, 32.3% of Texas' 254 counties were urban (n=82). The severe maternal morbidity rates by urban and rural counties are presented in Figure 3, both for the overall population and each racial/ethnic group. Severe maternal morbidity rates are significantly greater in rural counties than in urban counties overall, and particularly, among Hispanic and non-Hispanic white women. Among non-Hispanic black women, on the other hand, the severe maternal morbidity rate is greater in urban counties than in rural counties. However, because of small numbers of deliveries among non-Hispanic black women in rural areas, this difference is not statistically significant.

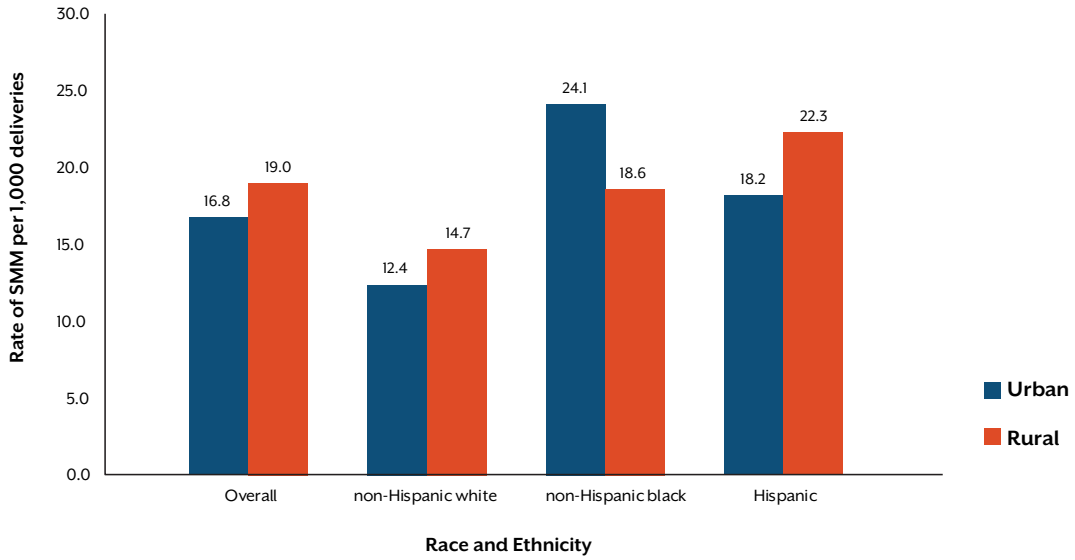

Figure 3. Severe maternal morbidity rate by urban/rural county designation and by race/ethnicity, Texas, 2016

Racial/Ethnic Differences by Metropolitan Areas

The following map is focused on non-Hispanic black women, and presents the severe maternal morbidity rate for each metropolitan area having at least 100 deliveries in Texas in 2016. The severe maternal morbidity rate among non-Hispanic black women was greater than the state rate (17.0 per 1,000 deliveries) in 11 out of the 18 metropolitan areas with at least 100 deliveries. The maps for other racial/ethnic groups at metropolitan area-level are available in the online story map.

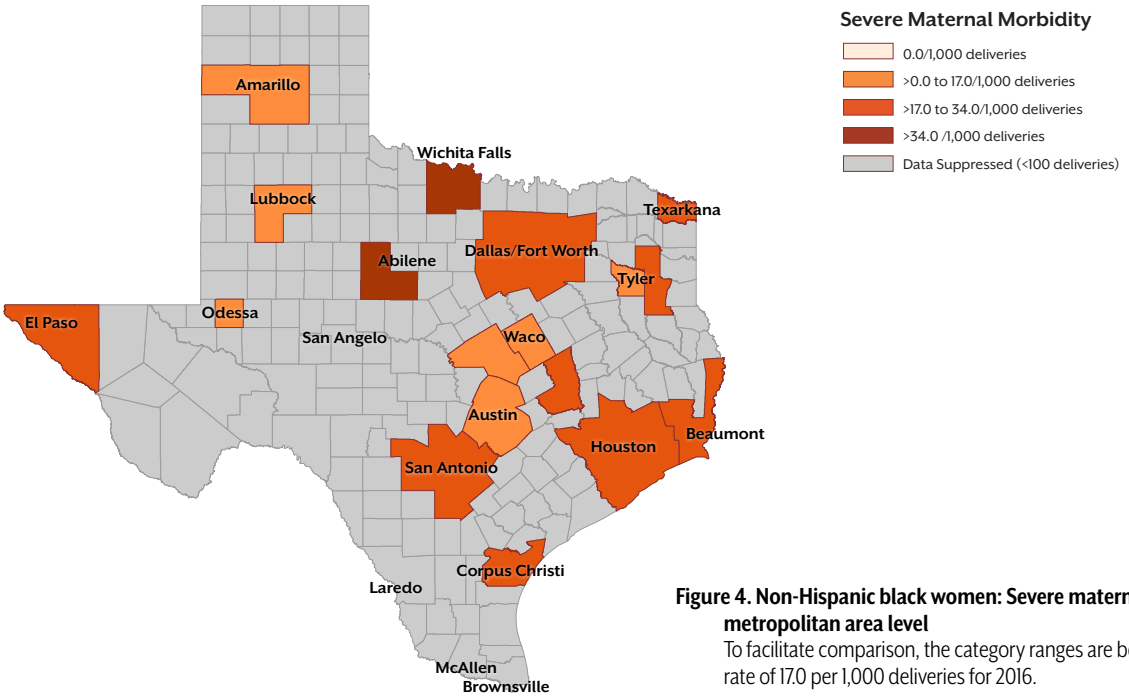

Figure 4. Non-Hispanic black women: Severe maternal morbidity rate at metropolitan area level
To facilitate comparison, the category ranges are benchmarked to the state rate of 17.0 per 1,000 deliveries for 2016.

Severe Maternal Morbidity Rate at County Level, Texas, 2016

In 2016, substantial variation was observed in severe maternal morbidity rate across counties with at least 100 deliveries (n=138) in Texas. The rate of severe maternal morbidity ranged from 0.0 to 55.3 per 1,000 deliveries with a median of 15.0 per 1,000 deliveries in 2016 (Figure 5).

Among these 138 counties with at least 100 deliveries, more than one-third of the counties (36.2%, n=50) had a severe maternal morbidity rate that was greater than the state rate but at or below double the state rate. An additional 7.3% of the counties (n=10) had a severe maternal morbidity rate that was more than double the state rate (Figure 5).

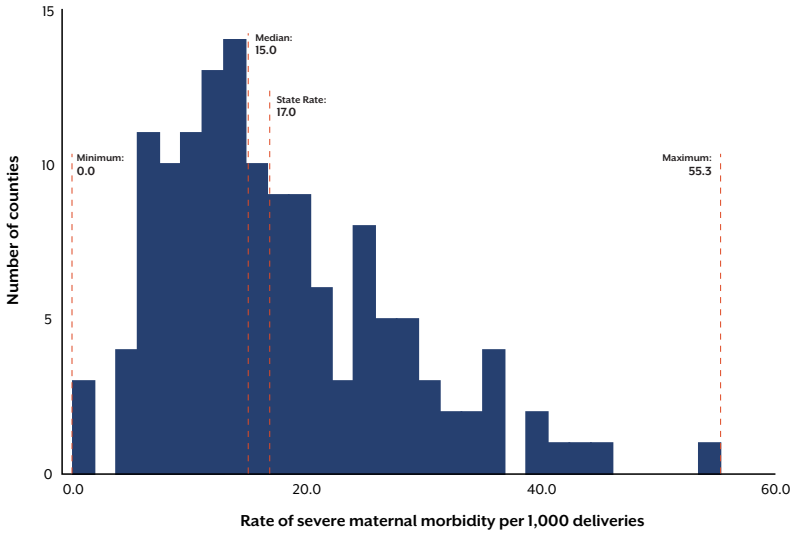

Figure 5. Distribution of severe maternal morbidity rate by county, Texas, 2016

Severe Maternal Morbidity Rate at ZIP Code Level, Texas, 2016

Similarly, substantial variation was observed in severe maternal morbidity rates across ZIP Codes in Texas in 2016. Among the 815 ZIP Codes with at least 100 deliveries included in the analysis, the severe maternal morbidity rate ranged from 0.0 to 59.2 per 1,000 deliveries in 2016 (Figure 6).

Nearly one-third of ZIP Codes (32.6%, n=266) had a severe maternal morbidity rate that was greater than the state rate but at or below double the state rate. Another 6.6% of ZIP Codes (n=54) had a severe maternal morbidity rate that was more than double the state rate (Figure 6).

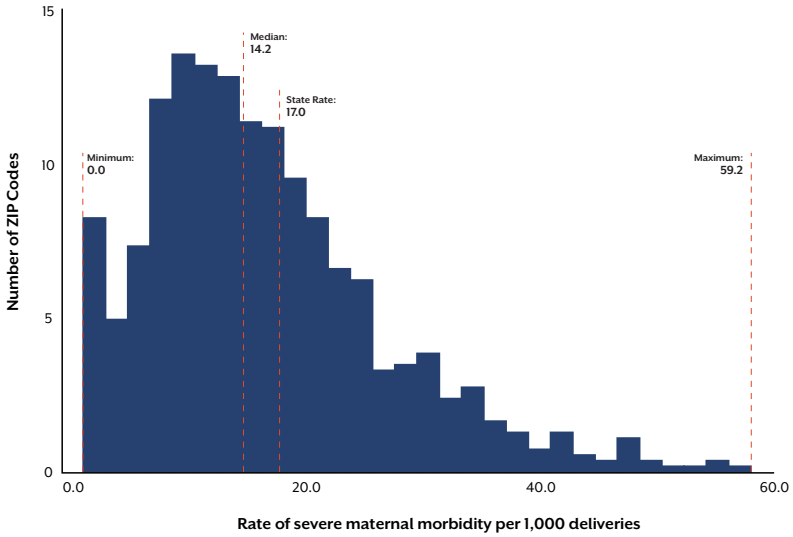

Figure 6. Distribution of severe maternal morbidity rate by ZIP Code, Texas, 2016

Temporal Variation in Severe Maternal Morbidity Rate at ZIP Code Level, Texas, 2014-2016

Variation in severe maternal morbidity rate was observed across years 2014-2016 at the ZIP Code level. There were ZIP Codes (n=49) with consistently high severe maternal morbidity rates (at or above 75th percentile) in 2014, 2015, and 2016 (Table 1). These ZIP Codes were primarily located in the Dallas-Fort Worth-Arlington, Houston-The Woodlands-Sugar Land, and San Antonio-New Braunfels metropolitan areas. Similarly, 36 ZIP Codes had consistently low severe maternal morbidity rate (at or below 25th percentile) in all three years (Table 1). They were predominantly located in the Austin-Round Rock-San Marcos, El Paso, and Amarillo metropolitan areas.

Table 1. List of ZIP Codes with consistently high or low severe maternal morbidity rate between 2014-2016, Texas

	Stable High ZIP Codes ‡	Stable Low ZIP Codes ¤
Metropolitan Areas		
Abilene	79605	
Amarillo		79015, 79104, 79109, 79118
Austin-Round Rock-San Marcos		78626, 78634, 78640, 78727, 78731, 78732, 78735, 78749, 78751
Beaumont-Port Arthur	77651	
Corpus Christi	78368	

Dallas-Fort Worth-Arlington	75001, 75040, 75041, 75050, 75061, 75116, 75146, 75210, 75211, 75215, 75216, 75217, 75220, 75223, 75228, 75231, 75233, 75243, 75401, 76053	76092, 76226
El Paso		79905, 79915, 79930, 79935
Houston-The Woodlands-Sugar Land	77014, 77033, 77065, 77445, 77520	77029, 77384, 77401
Killeen-Temple-Fort Hood		76502
Lubbock		79415
McAllen-Edinburg-Mission		78557, 78595
Odessa		79765
San Angelo		76904
San Antonio-New Braunfels	78065, 78112, 78201, 78207, 78210, 78211, 78214, 78221, 78225, 78228, 78237, 78242, 78252	78015, 78070
Sherman-Denison		75092
Texarkana	75501	
Tyler		75701, 75771, 75791
Waco		76710
Non metropolitan area	75951, 76801, 77351, 77414, 77488, 78332, 79007	78076

‡**Stable high ZIP Codes** are those that have severe maternal morbidity rate at or above 75th percentile across three years.
¤ **Stable low ZIP Codes** are those that have severe maternal morbidity rate at or below 25th percentile across three years.

Figure 7 illustrates one example of a region (Dallas-Fort Worth-Arlington metropolitan area) with ZIP Codes with consistently high (or low) severe maternal morbidity rate across three years.

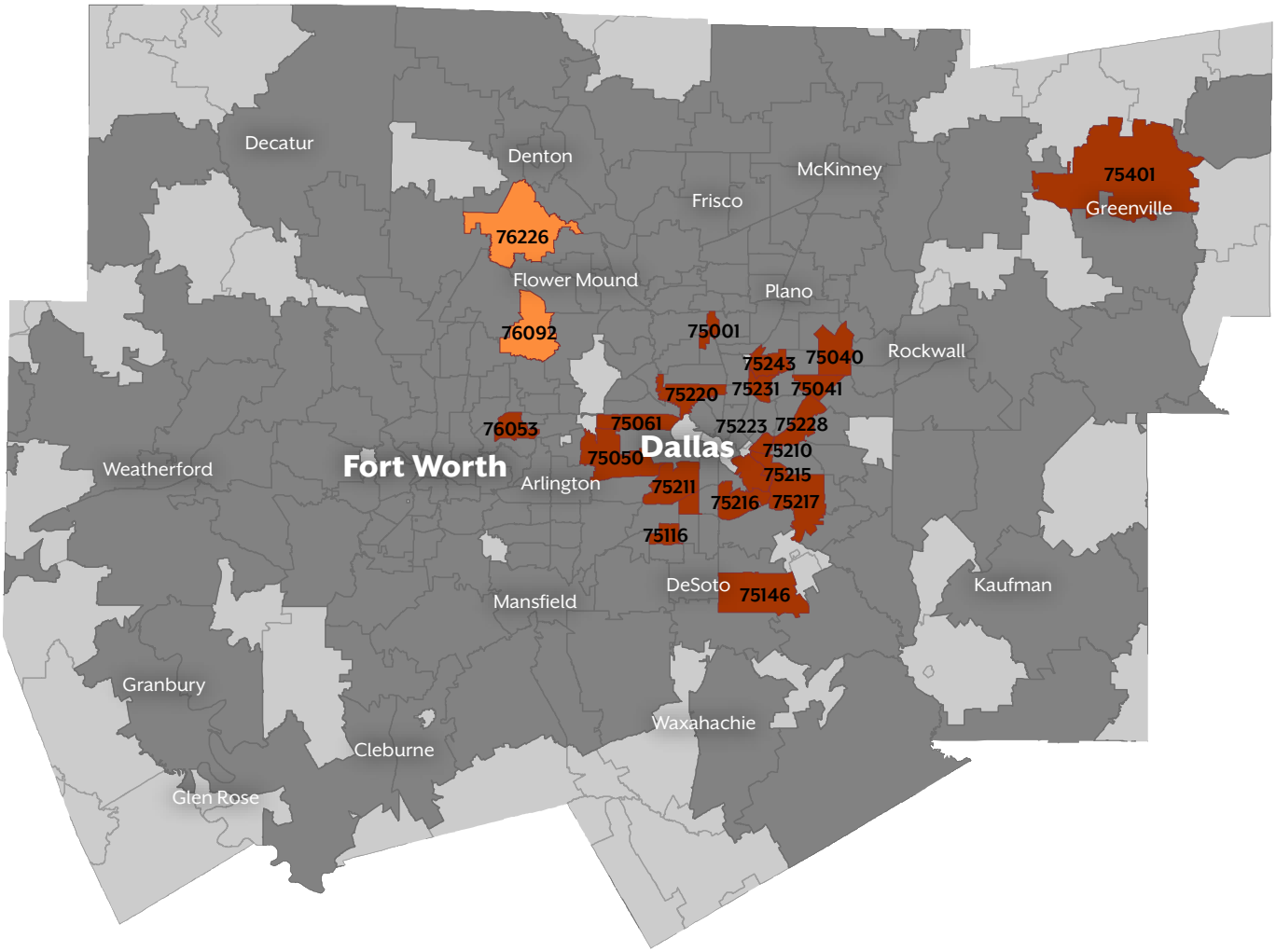

Figure 7. Dallas-Fort Worth-Arlington metropolitan area: ZIP Codes with consistently high or low severe maternal morbidity rate, 2014–2016

Figures 8 and 9 illustrate similar examples of stable high (or low) ZIP Codes in Houston-The Woodlands-Sugarland and San Antonio-New Braunfels metropolitan areas, respectively.

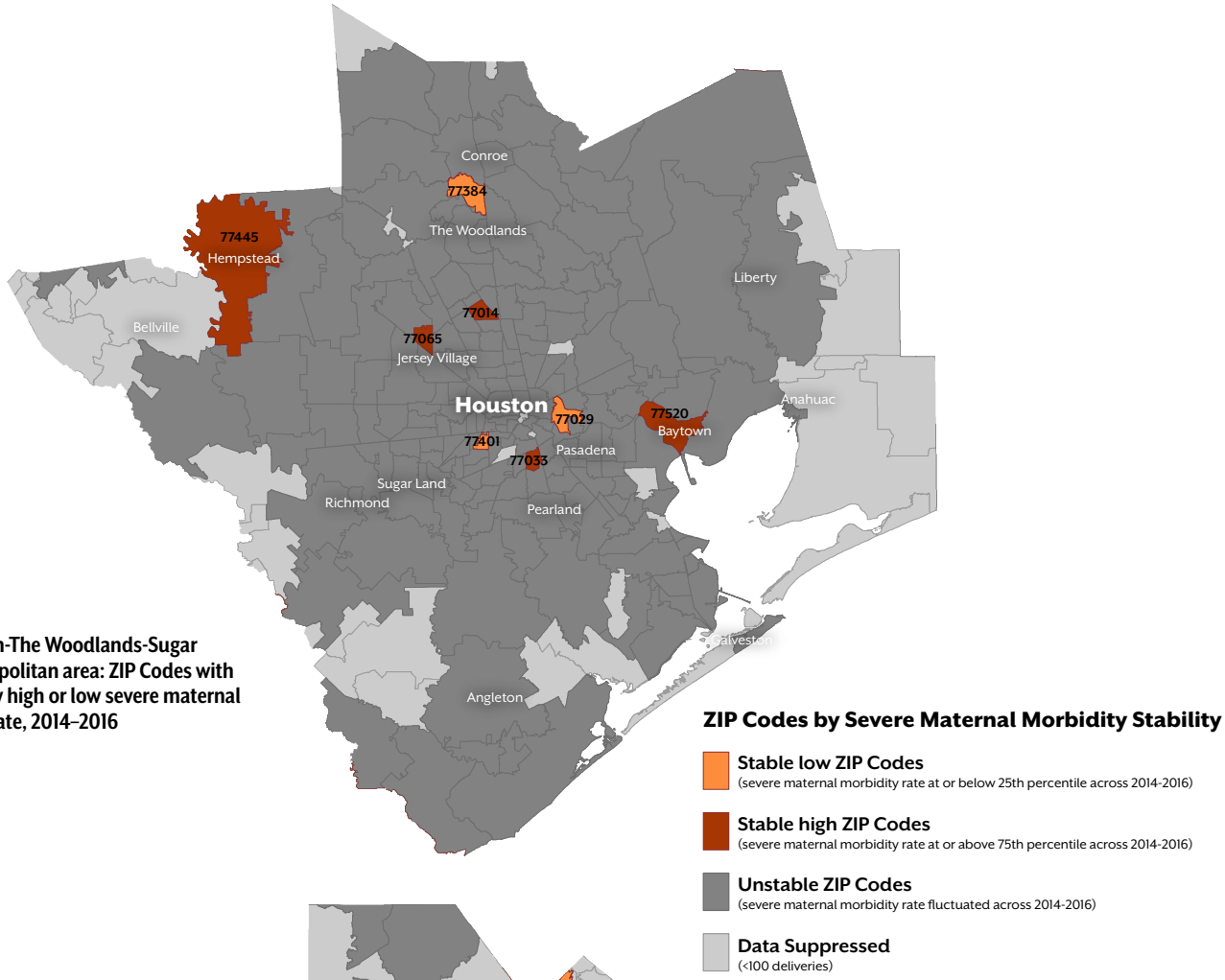

Figure 8. Houston-The Woodlands-Sugar Land metropolitan area: ZIP Codes with consistently high or low severe maternal morbidity rate, 2014–2016

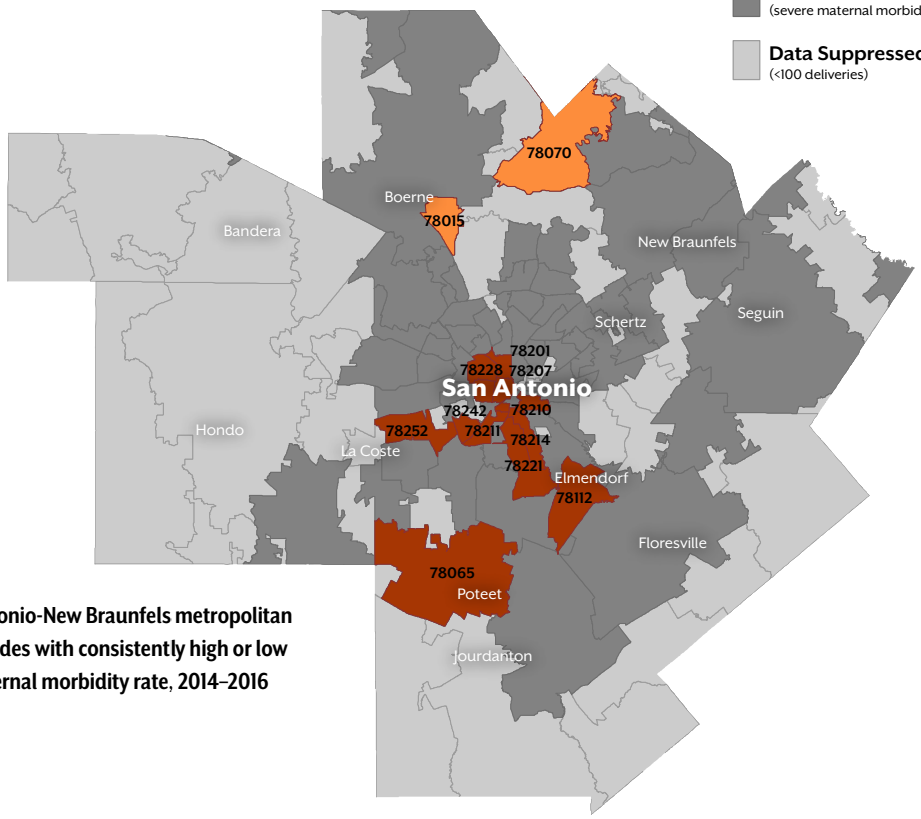

Figure 9. San Antonio-New Braunfels metropolitan area: ZIP Codes with consistently high or low severe maternal morbidity rate, 2014–2016

Similarly, Figure 10 illustrates another example of a region (Austin-Round Rock-San Marcos metropolitan area) with stable ZIP Codes, all of which had consistently low severe maternal morbidity rate across three years.

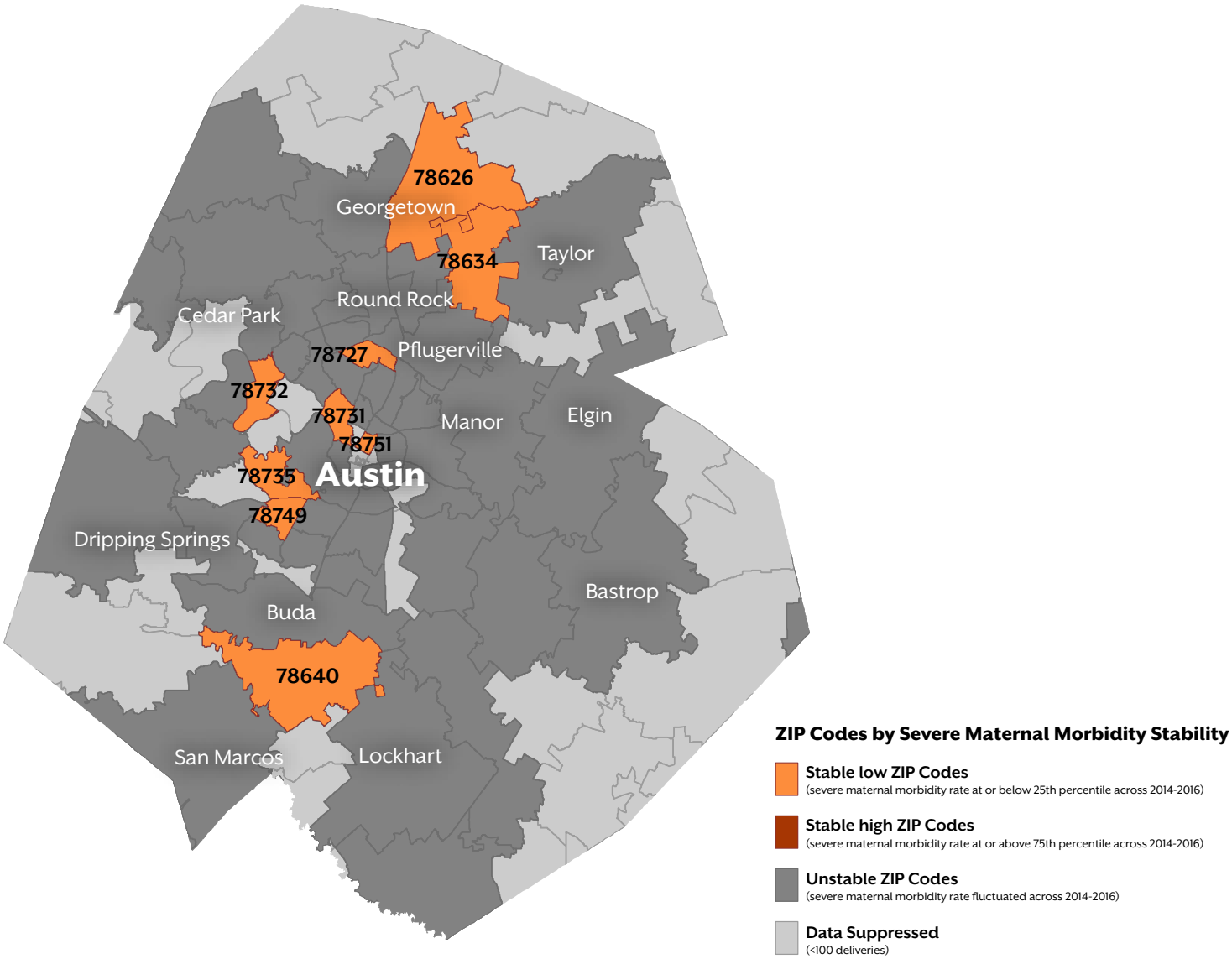

Figure 10. Austin-Round Rock-San Marcos metropolitan area: ZIP Codes with consistently low severe maternal morbidity rate, 2014–2016

While many of the ZIP Codes in these large metropolitan areas had consistently high (or low) severe maternal morbidity rates between 2014-2016, there were also some ZIP Codes that showed substantial fluctuations in their rates. In the Dallas-Fort Worth-Arlington area, for example, severe maternal morbidity rate for ZIP Code 75287 was 21.5, 15.0, and 23.3 per 1,000 deliveries in 2014, 2015, and 2016, respectively. Similar variations were observed for Houston and San Antonio areas. In Austin-Round Rock-San Marcos area, we observed unstable ZIP Codes as well, with the severe maternal morbidity rate for ZIP Code 78752 being 15.9, 20.3, and 8.7 per 1,000 deliveries in 2014, 2015, and 2016, respectively. It should also be noted that fluctuations were observed in the number of deliveries between years within ZIP Codes.

Conclusions

Between 2011-2016 in Texas, the rate of severe maternal morbidity has remained fairly consistent (17.0-19.9 per 1,000 deliveries). Within that overall consistency, however, there are substantial disparities by both race/ethnicity and geography. The rate of severe maternal morbidity for non-Hispanic black women was nearly twice that of non-Hispanic white women in all years. These racial/ethnic disparities were observed in urban/rural counties as well as in metropolitan areas in Texas. At the smallest geographic level examined (ZIP Code), there were some ZIP Codes with consistently high (or low) severe maternal morbidity rates, whereas for others the rates fluctuated within this time period.

Severe maternal morbidity reflects not only individual risk, but also other contextual factors which may place women at higher risk. These maps provide a starting point to consider the patterns and context of severe maternal morbidity. Additional analyses would be required to understand why some areas have consistently high (or low) severe maternal morbidity rates. These maps are intended to be useful for public health practitioners and researchers wanting to delve deeper into the contributions of individual/family, provider, facility, health system, and community factors [15] to severe maternal morbidity. They are also intended to add to the information that local communities need to make the best decisions about maternal health and risk in their neighborhoods, cities, and counties.

Acknowledgment

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Technical Notes:

Data Source

This analysis used the 2011 through 2016 all-payer hospital discharge public use data file provided by the Texas Health Care Information Collection (THCIC) at the Center for Health Statistics, Texas Department of State Health Services (DSHS) [17].

Severe Maternal Morbidity Measure

Delivery hospitalizations were identified using a published algorithm, which incorporates International Classification of Diseases, Ninth/Tenth Revision, Clinical Modification (ICD-9-CM/ICD-10-CM) billing and procedure codes as well as diagnosis-related group (DRG) codes to select delivery outcomes and delivery-related procedures [18].

Measures were calculated at the specific geographic levels for those geographic areas with at least 100 deliveries among women aged 15-49 years and who were residents of Texas at the time of delivery. Severe maternal morbidity rate was reported per 1,000 deliveries. Severe maternal morbidity was identified based on a list of 21 ICD-9-CM/ICD-10-CM diagnosis and procedure codes developed from previously proposed conceptual models and frameworks [8, 12, 19, 20]. It should be noted that United States transitioned to ICD-10-CM codes in October 2015 [21]. The Centers for Disease Control and Prevention and other clinical and public health partners reviewed the ICD codes and developed the crosswalk for severe maternal morbidity for comparability between ICD-9-CM and ICD-10-CM codes [8]. Also, of note, unlike Callaghan and colleagues' definition [12], in-hospital mortality, transfer, or length of stay were not considered when defining severe maternal morbidity. Rather, severe maternal morbidity definition followed the Alliance for Innovation on Maternal Health (AIM) classification scheme, where delivery hospitalizations with any of the 21 conditions (Table 2) were identified as delivery hospitalizations with severe maternal morbidity [22]. Thus, the definition for severe maternal morbidity in this report is broader than Callaghan and colleagues' definition [12].

Geographic region was defined as the woman's ZIP Code/county of residence at the time of delivery, which serves as a proxy for where they lived during delivery. For ZIP Code mapping purposes, the 2016 ZIP Code boundaries were used. Urban/rural county designation was based on the National Center for Health Statistics scheme [23].

Data Suppression and Limitations

It is important to acknowledge the limitations of the data source when interpreting the information [17, 24]. Briefly, hospital discharge data are primarily used for claims purposes and provide limited information on certain conditions. These data are also subject to errors of omission and commission by medical coders that vary between hospitals and within hospitals. Due to limitations in the coding of race/ethnicity in the dataset, the racial/ethnic disparities in severe maternal morbidity at small geographic levels could not be examined. If a hospital has fewer than ten patient discharges in a race category, it is changed to "Other" and ethnicity for that particular race is suppressed. Furthermore, to protect patient confidentiality, many of the ZIP Codes are truncated or suppressed entirely by Texas DSHS under certain conditions. Thus, severe maternal morbidity rates in many rural areas could not be ascertained.

In order to protect confidentiality and ensure a minimum level of data stability, the rate was suppressed for geographic areas with fewer than 100 deliveries in a given year. Furthermore, given the limitation of the data source, the delivery number by a geographic area (e.g., ZIP Code) was matched to the number of births by that geographical area for 2014 that is available online from a previously published report from The University of Texas System Population Health group [25]. Thus, any ZIP Code where the total number of deliveries from THCIC data was not within the birth category range from the birth certificate data was excluded to ensure data stability (n=6 ZIP Codes). A similar methodology was applied to county-level data (n=33 counties excluded).

Standard errors and 95% confidence intervals were calculated using a Poisson mean and the normal approximation method. All rates that survive the suppression rule but have a relative standard error (RSE) of 30% or greater were flagged as unstable on the maps (denoted by asterisks). Flagged rates should be interpreted with caution.

Table 2. Diagnostic codes used to identify severe maternal morbidity among delivery hospitalizations

	ICD-9-CM Definition	ICD-10-CM Definition
Acute myocardial infarction	410.xx	I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I21.9, I21.A1, I21.A9, I22.0, I22.1, I22.2, I22.8, I22.9
Acute renal failure	584.x, 277.8	N17.0, N17.1, N17.2, N17.8, N17.9, O90.4
Adult respiratory distress syndrome	518.5, 518.81, 518.82, 518.84, 799.1	J80, J95.1, J95.2, J95.3, J95.821, J95.822, J96.00, J96.01, J96.02, J96.20, J96.21, J96.22, R09.2
Amniotic fluid embolism	673.1x	O88.111, O88.112, O88.113, O88.119, O88.12, O88.13
Aneurysm	441.xx	I71.00, I71.01, I71.02, I71.03, I71.1, I71.2, I71.3, I71.4, I71.5, I71.6, I71.8, I71.9, I79.0
Cardiac arrest/ventricular fibrillation	427.41, 427.42, 427.5	I49.01, I49.02, I46.2, I46.8, I46.9
Disseminated intravascular coagulation	286.6, 286.9, 666.3x	D65, D68.8, D68.9, O72.3
Eclampsia	642.6x	O15.00, O15.02, O15.03, O15.1, O15.2, O15.9
Heart failure/arrest during surgery or procedure	669.4x, 997.1	I97.120, I97.121, I97.130, I97.131

Puerperal cerebrovascular disorders	430, 431, 432.x, 433.xx, 434.xx, 436, 437.x, 671.5x, 674.0x, 997.2, 999.2	I60.00, I60.01, I60.02, I60.10, I60.11, I60.12, I60.2, I60.20, I60.21, I60.22, I60.30, I60.31, I60.32, I60.4, I60.50, I60.51, I60.52, I60.6 I60.7, I60.8, I60.9, I61.0, I61.1, I61.2, I61.3, I61.4, I61.5, I61.6, I61.8, I61.9, I62.00, I62.01, I62.02, I62.03, I62.1, I62.9, I63.00, I63.011, I63.012, I63.013, I63.019, I63.02, I63.031, I63.032, I63.033, I63.039, I63.09, I63.10, I63.111, I63.112, I63.113, I63.119, I63.12, I63.131, I63.132, I63.133, I63.139, I63.19, I63.20, I63.211, I63.212, I63.213, I63.219, I63.22, I63.231, I63.232, I63.233, I63.239, I63.29, I63.30, I63.311, I63.312, I63.313, I63.319, I63.321, I63.322, I63.323, I63.329, I63.331, I63.332, I63.333, I63.339, I63.341, I63.342, I63.343, I63.349, I63.39, I63.40, I63.411, I63.412, I63.413, I63.419, I63.421, I63.422, I63.423, I63.429, I63.431, I63.432, I63.433, I63.439, I63.441, I63.442, I63.443, I63.449, I63.49, I63.50, I63.511, I63.512, I63.513, I63.519, I63.521, I63.522, I63.523, I63.529, I63.531, I63.532, I63.533, I63.539, I63.541, I63.542, I63.543, I63.549, I63.59, I63.6, I63.8, I63.9, I65.01, I65.02, I65.03, I65.09, I65.1, I65.21, I65.22, I65.23, I65.29, I65.8, I65.9, I66.01, I66.02, I66.03, I66.09, I66.11, I66.12, I66.13, I66.19, I66.21, I66.22, I66.23, I66.29, I66.3, I66.8, I66.9, I67.0, I67.1, I67.2, I67.3, I67.4, I67.5, I67.6, I67.7, I67.81, I67.82, I67.83, I67.841, I67.848, I67.89, I67.9, I68.0, I68.2, I68.8, O22.51, O22.52, O22.53, O87.3, I97.810, I97.811, I97.820, I97.821
Pulmonary edema/acute heart failure	428.1, 518.4	J81.0, I50.1, I50.20, I50.21, I50.23, I50.30 I50.31, I50.33, I50.40, I50.41, I50.43, I50.9
Severe anesthetic complications	668.0x, 668.1x, 668.2x	O74.0, O74.1, O74.2, O74.3, O89.01, O89.09, O89.1, O89.2
Sepsis	038.xx, 995.91, 995.92, 670.2	O85, T80.211A, T81.4XXA, R65.20, A40.0, A40.1, A40.3, A40.8, A40.9, A41.01, A41.02, A41.1, A41.2, A41.3, A41.4, A41.50, A41.51, A41.52, A41.53, A41.59, A41.81, A41.89, A41.9, A32.7
Shock	669.1x, 785.5x, 995.0, 995.4, 998.0	O75.1, R57.0, R57.1, R57.8, R57.9, R65.21, T78.2XXA, T88.2XXA, T88.6XXA, T81.10XA, T81.11XA, T81.19XA
Sickle cell disease with crisis	282.62, 282.64, 282.69	D57.00, D57.01, D57.02, D57.211, D57.212, D57.219, D57.411, D57.412, D57.419, D57.811, D57.812, D57.819
Air and thrombotic embolism	415.1x, 673.0x, 673.2x, 673.3x, 673.8x	I26.01, I26.02, I26.09, I26.90, I26.92, I26.99, O88.011, O88.012, O88.013, O88.019, O88.02, O88.03, O88.211, O88.212, O88.213, O88.219, O88.22, O88.23, O88.311, O88.312, O88.313, O88.319, O88.32, O88.33, O88.811, O88.812, O88.813, O88.819, O88.82, O88.83
Blood transfusion	99.0x	30233H1, 30233K1, 30233L1, 30233M1, 30233N1, 30233P1, 30233R1, 30233T1 30240H1, 30240K1, 30240L1, 30240M1, 30240N1, 30240P1, 30240R1, 30240T1 30243H1, 30243K1, 30243L1, 30243M1, 30243N1, 30243P1, 30243R1, 30243T1 30233N0, 30233P0, 30240N0, 30240P0, 30243N0, 30243P0

Conversion of cardiac rhythm	99.6x	5A2204Z, 5A12012
Hysterectomy	68.3x-68.9	0UT90ZZ, 0UT94ZZ, 0UT97ZZ, 0UT98ZZ, 0UT9FZZ
Temporary tracheostomy	31.1	0B110Z4, 0B110F4, 0B113Z4, 0B113F4, 0B114Z4, 0B114F4
Ventilation	93.90, 96.01-96.05, 96.7x	5A1935Z, 5A1945Z, 5A1955Z

ICD-9-CM = International Classification of Diseases, Ninth Revision, Clinical Modification
ICD-10-CM = International Classification of Diseases, Tenth Revision, Clinical Modification

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