



# Healthcare Disparities/Opportunities in Old Aurora

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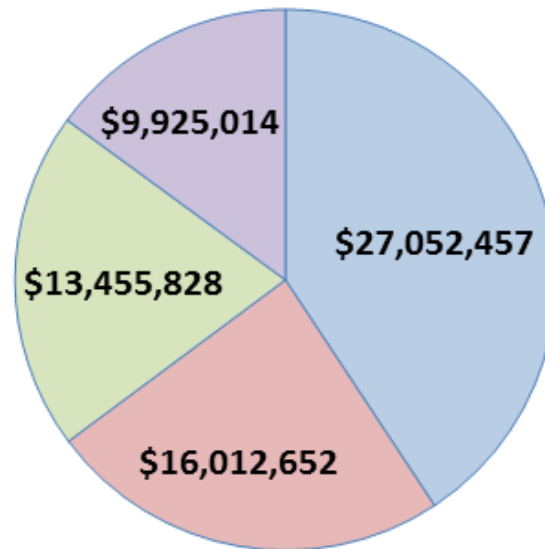
Children's Hospital Colorado



# In 2013: > \$65 million in Opportunity!

**Figure: Potential Charge Savings for Old Aurora, 2013**

■ Pediatric   ■ Neonatal   ■ Pregnancy   ■ Emergency Department



# Methods

- Emergency Department Visit & Hospitalization Rates for Mothers and Children
- Rates per 100,00 at risk individuals:
  - **Numerators:** 2013 Colorado Hospital Association data
    - Common pregnancy, neonatal, and pediatric diagnoses
  - **Denominators:**
    - Pediatric: 2013 American Community Survey
    - Pregnancy: Live deliveries
    - Neonatal: Live births
- **“Old Aurora”** (defined by zip codes 80010, 80011, 80012) compared to remainder of Colorado
- **“Potential Charge Savings”** = \$\$ saved if Aurora rates were same as rest of Colorado
  - **Application:** These \$\$ could be redeployed to alter how care is provided to avoid excess utilization



# ED visits – Children < 18 years

- Children in Old Aurora have 76% more emergency department visits compared to children in the rest of Colorado for 19 of the top 20 disease categories and range from 36% to 232% higher for 19 of the top 20 disease categories.
- For many disease categories, children in Old Aurora are significantly less likely to have either weekend or weekday/after hours visits to the emergency department.
  - This suggests that they are more likely to have such emergency department visits during the day on weekdays, and may be indicative of a lack of a medical home.
- Many of the common diseases categories reflect symptoms that might better have been managed using phone triage or next day primary care visits (e.g Viral enteritis, constipation, URI).
- If Old Aurora children had the same rates of emergency department visits as children in the rest of Colorado, there would be a potential net annual charge savings of \$9.9 million.



# Hospital Discharges

- Children in Old Aurora are significantly more likely to be admitted to the hospital for common pediatric conditions
- Overall, hospitalization rates are significantly higher for children in Old Aurora compared to the rest of Colorado, with hospitalization rates that are 57% higher.
- If Old Aurora children had the same hospitalization rates as the children in the rest of Colorado, there would be a potential net annual charge savings of \$27 million.



# Live Births

- Newborns in Old Aurora are significantly more likely to have higher rates for neonatal complications of bronchopulmonary dysplasia, intraventricular hemorrhage, very low birth weight, or prematurity compared to newborns in the rest of Colorado.
- If Old Aurora newborns had the same complication rates as newborns in the rest of Colorado, there would be a potential net annual charge savings of \$16 million.



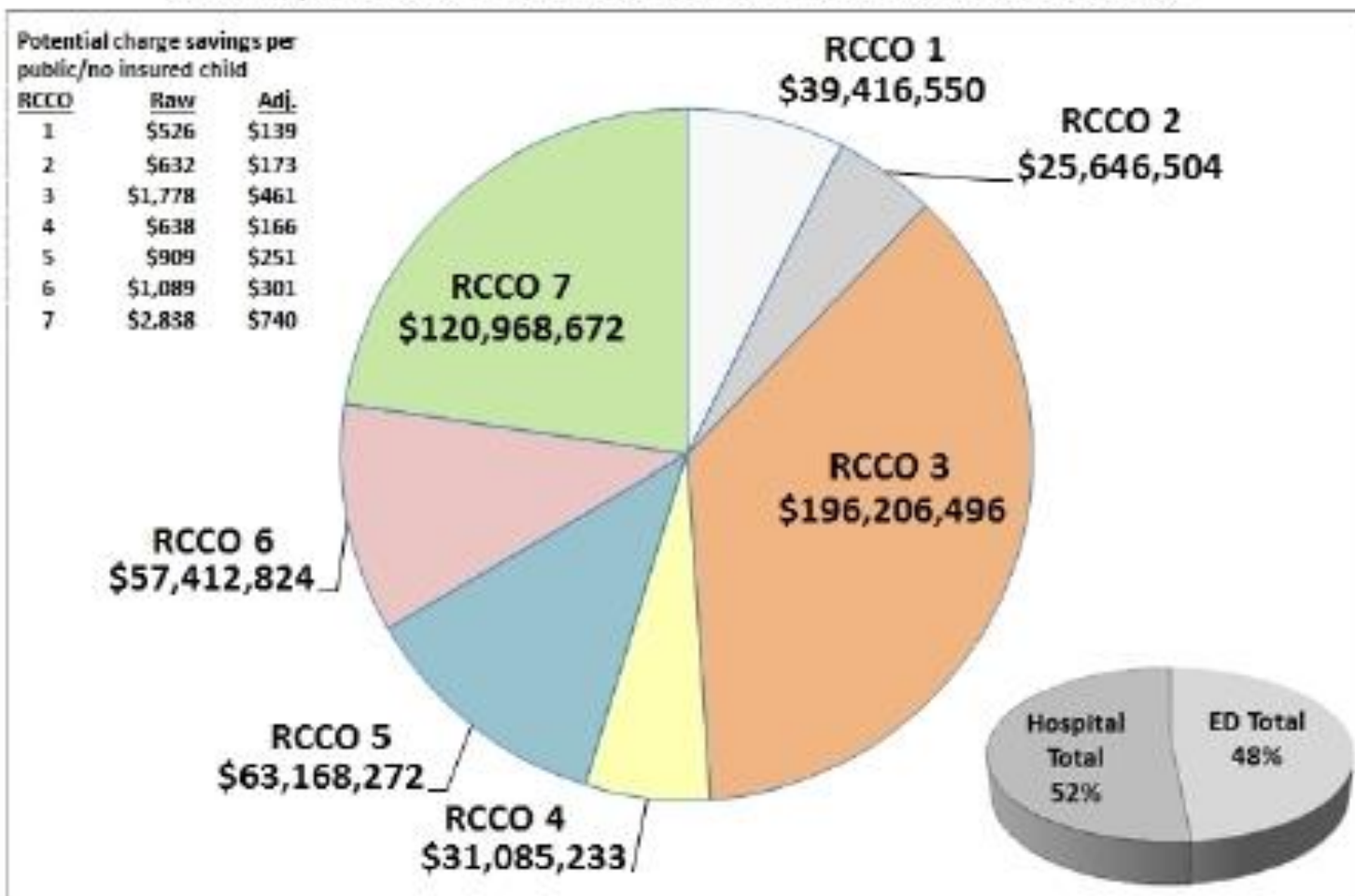
# Pregnancy Outcomes

- Pregnant women in Old Aurora are significantly more likely to be admitted to the hospital for common pregnancy conditions such as anemia, membrane rupture, abnormal glucose tolerance, and abnormal fetal heart rate but are significantly less likely to be post-term or have a cesarean delivery.
- Pregnant women in Old Aurora are less likely to have private insurance and more likely to have poor prenatal care.
- If pregnant women living in Old Aurora had the same complication rates as pregnant women in the rest of Colorado, there would be a potential charge savings of \$13.5 million.



# Even greater opportunity for children with public or no health insurance!

Figure 1: Distribution of \$534 million (adjusted \$141 million) in direct potential charge savings by Colorado RCCO for potentially avoidable hospitalizations and ED visits by children with Public or No health insurance, 2013





# Summary

- Mothers and their children in Old Aurora have higher ED and Hospital utilization rates than those in the rest of Colorado
- Overall excess charges are > \$65 million annually.
  - Perhaps > \$100 million for those with Public or No health insurance.
  - Note: Reimbursed charges may be 20-35% of billed charges
- That's still a lot of money and suggests a good business case to consider improvements in primary health care delivery such as:
  - Medical home access
  - Expanded clinic hours
  - Telephone triage
  - Care management
  - Compliance Incentives

