Can Early Health Access Narrow the Black-White Achievement Gap?

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Racial test score gap narrowed during the 1980’s

[Graph showing the black-white gap in standardized NAEP score over years from 1971 to 2004, with data points for reading and math.]
Narrowing began earlier for younger ages:
Suggests birth cohort pattern
Examined by birth year, narrowing begins around 1963.
Racial gap in infant mortality also narrowed sharply beginning in mid-1960’s
Research shows one cause of infant mortality declines was hospital desegregation

- Almond, Chay and Greenstone (2006)
- Hospitals in the U.S. South were largely segregated by race by early 1960’s
- Federal government withheld Medicare funds until hospitals certified as integrated
- Integration occurred at different times in different counties, states
- Post-neonatal mortality of blacks declined when hospitals were integrated
Relating test score increases and infant mortality decreases

- Chay, Guryan and Mazumder (2009)
- Average Armed Forces Qualifying Test (AFQT) scores by race, year of birth, and state/region
- Post-neonatal mortality rates (PNMR) by race, year, state/region
- PNMR: deaths per 1,000 births between 28 days and 1 year
- South: AL, AR, FL, GA, LA, MS, NC, SC, TN, VA
- Border: DE, KY, MD, TX, WV
- Rustbelt: IL, IN, MI, MO, NY, OH, PA
South-North differences in white levels and black-white differences

A. PNMR

B. AFQT scores by year of birth
Relationship between PNMR decreases and AFQT increases

- Black-white AFQT gap decreased beginning with 1963 birth cohort, continuing at least for next 10-12 cohorts
  - Narrowing most dramatic in the South
  - Narrowed by about $\frac{1}{3}$rd of a standard deviation

- States with largest decline in racial PNMR gap saw largest decline in AFQT gap between early 60’s and early 70’s cohorts

- States where PNMR gap narrowed earlier saw AFQT gap begin to narrow among earlier cohorts
Interpretation

We believe...

• Increased access to health care in the South as a result of hospital desegregation
• And increased health in first 3 years of life

Led to ...

• A narrowing of black-white test score gap of those cohorts of Southern-born blacks
• Beginning with cohort born in 1963 and continuing for 10-12 years
Similar pattern evident for college attendance
Policy implications

• Findings suggest that efforts to reduce racial achievement gaps and racial inequality should look to early health as one place to narrow inequalities.

• Early investments in health access may have large long-term benefits.

• Much recent research points to the importance of \textit{in utero} conditions. Our results suggest early life health post-birth is also important for long-term wellbeing.