Research
Education
Patient Care
Estimated County-Level Prevalence of Selected Underlying Medical Conditions Associated with Increased Risk for Severe COVID-19 Illness — United States, 2018

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Source: Centers for Disease Control and Prevention

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North Carolina COVID-19 “risk belt” [not in original]
Figure 5.1 ii. All Causes of Death:
Trends in age-adjusted mortality rates for ENC29, RNC71, NC, and US, 1979-2014 with projections to 2020

ENC29 16-yr trendline
23% decrease
R² = 0.94
y = -14.70x + 1,040.09

RNC71 16-yr trendline
16% decrease
R² = 0.87
y = -9.03x + 913.20

NC 16-yr trendline
17% decrease
R² = 0.89
y = -9.54x + 532.96

US 16-yr trendline
20% decrease
R² = 0.97
y = -11.16x + 888.61

1999 ENC29 rate is 14% greater than RNC71
2014 ENC29 rate is 5% greater than RNC71

Comparison of Fitted Rates in 1999

<table>
<thead>
<tr>
<th>ENC29</th>
<th>RNC71</th>
<th>NC</th>
<th>US</th>
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<tbody>
<tr>
<td>12% LT</td>
<td>5% LT</td>
<td>5% LT</td>
<td>ENC29 16-yr trendline</td>
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<tr>
<td>14% GT</td>
<td>2% GT</td>
<td>3% LT</td>
<td>NC 16-yr trendline</td>
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<td>11% GT</td>
<td>8% LT</td>
<td>ENC29 16-yr trendline</td>
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Comparison of Fitted Rates in 2014

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</table>
- Investigational drug
- COVID-19 disease
- Caused by SARS-CoV-2 virus
Research

- NIH sponsored clinical trials
- Industry sponsored trials
- CARES ACT investigator initiated research
- National database observational research
- Basic research translating into predictive models of outcome
- Animal model research in BSL3
- Rapid deployment of new detection tools
- Multiple publications
- Multiple secondary grant applications
Education

• Weekly on line COVID update broadcast to over 200 providers in ENC with on line enduring materials including both outpatient and inpatient protocols

• 24/7 access to Infectious Disease experts for questions and referrals to clinical trials.

• Collaboration of clinical trials into regional hospitals

• Brody graduates stood out
Patient care

• Extraordinary effort over 10 months by an extraordinary group of doctors and nurses
• Exceptional outcomes
• Stood up both antigen and PCR testing at multiple sites
• Stood up antibody testing to both nucleocapsid and spike
• Genomic sequencing
• BSL3
• Where do we go from here
Severe COVID 19 risk factors

• CKD
• Obesity
• CVD/CVA
• HTN
• DM
• Anxiety
• Vitamin D
Severe COVID 19 risk factors

- CKD - fingerstick creatinine
- Obesity - BMI
- CVD/CVA – KardiaMobile 6L
- HTN - ABP
- DM – fingerstick HbA1c
- Anxiety - telepsych
- Vitamin D - fingerstick
FREE Health Fair
10:00 am - 4:00 pm
Covid Testing
Diabetes Screening
Blood Pressure Check
Flu Shots
Reasons why patients don’t seek care

• Can’t afford
• Limited transportation
• Care too complex
• Concerns about privacy
• No time, working 2+ jobs
Reasons why patients don’t seek care- solutions

• Can’t afford – keep visits below $25
• Limited transportation – we meet them at work
• Care too complex – 10 minutes of time
• Concerns about privacy – can participate in screening without identification
• No time, working 2+ jobs – part of work
SERVIRE - Secondary Outcomes

- Increased entry to care
- Improved regional mortality economy

On-job Screenings

- Medic Provider Program - ECU
- Honors Course - ECU
- Access to clinical trials

Improved access to specialty care - tele