Building the Bridge Beyond 2018

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Disclosure Slide

- I have no conflicts of interest in relation to this presentation.
Economic Burden of CRC

- The economic impact of colorectal cancer (CRC) in the United States is expected to increase to $14.03 billion by 2020.

- Efforts at reducing the economic burden of CRC focus on preventing late stage presentation by improving access to screening colonoscopies.

Yabroff, K. et al. *Health economics*, 17(8), 947-959.
80% by 2018: Who are we leaving behind?

- In 2013, 30% of uninsured adults went without needed medical care

- 40% of uninsured adults have outstanding medical bills, 20% say those bills create significant financial strain

http://kff.org/uninsured/fact-sheet/key-facts-about-the-uninsured-population/
Percentage of U.S. Adults Without Health Insurance, by Quarter

Do you have health insurance coverage?
Among adults aged 18 and older

Quater 1 2008-Quarter 4 2014
Gallup-Healthways Well-Being Index
Arkansas, Kentucky Report Sharpest Drops in Uninsured Rate

Medicaid expansion, state exchanges linked to faster reduction in uninsured rate

by Dan Witten

WASHINGTON, D.C. — Arkansas and Kentucky lead all other states in the sharpest reductions in their uninsured rate among adult residents since the healthcare law’s requirement to have insurance took effect at the beginning of the year. Delaware, Washington, and Colorado round out the top five. All 10 states that report the largest declines in uninsured rates expanded Medicaid and established a state-based marketplace exchange or state-federal partnership.

<table>
<thead>
<tr>
<th>State</th>
<th>% Uninsured, 2013</th>
<th>% Uninsured, midyear 2014</th>
<th>Change in uninsured</th>
<th>Medicaid expansion AND state/partnership exchange in 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>22.5</td>
<td>12.4</td>
<td>-10.1</td>
<td>Yes</td>
</tr>
<tr>
<td>Kentucky</td>
<td>20.4</td>
<td>11.6</td>
<td>-8.8</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Study Backs Kentucky Medicaid Expansion

By ABBY GOODNOUGH FEB. 12, 2015

WASHINGTON — Gov. Steven L. Beshear of Kentucky released a study Thursday predicting that his expansion of Medicaid under the Affordable Care Act would generate a positive fiscal impact of nearly $1 billion for the state over the next seven years.
Despite ACAs, gaps exist

- It is estimated that 13.4% of Americans will continue to be uninsured.

- Uninsured in KY (500,000)
  - 20.4% in 2013
  - 11.4% in July 2014
  - 10.4% in Feb 2015 (481,315)
  - Ineligible (est. 80,000)

- Underinsured

http://obamacarefacts.com/sign-ups/obamacare-enrollment-numbers/
American Insurance Status by Percent (2016)

- 67% Adequately insured
- 23% Underinsured
- 9% Uninsured
- 1% Unregistered and uninsured

Impact of being uninsured in Kentucky

- Patients who lack insurance have more than twice the odds (OR = 2.2) of being diagnosed with advanced colorectal cancer.

- Patients with Medicaid have more than a 60% increase in the odds (OR = 1.62) of being diagnosed with late stage disease compared to patients with private insurance.
How are we preventing colon cancer for people in the gap?

- Our central hypothesis is that providing pro bono colonoscopies to uninsured patients at high-risk for CRC successfully detects early stage disease and is cost-effective.
Methods: The Partnership

- The Kentucky Colon Cancer Prevention Project was funded by the state of Kentucky when the Cabinet of Health examined our ranking of 48th in the country for colon cancer screening.

- Surgery on Sunday Louisville, Inc. is a non profit organization that provides free outpatient surgical procedures to uninsured/underinsured people in areas surrounding Louisville, KY
HOW Surgery on Sunday works

Referral from community health clinic or CCPP

Surgery on Sunday Louisville

Exclusion Criteria
• BMI > 35 REMOVED

Free Surgery and Endoscopy

3 Hospital Systems
2 Surgery Centers
Volunteers
Facilities
Equipment
Supplies
Methods: Patient cohort

- Patients who were considered high risk for CRC were offered free screening colonoscopies.

- Patient data from these colonoscopies was prospectively collected over a 12-month period, and the incidence of CRC within our cohort was compared to a control group of uninsured patients from the SEER registry.
Methods: Cost comparison

- We used SEER-Medicare data of health expenditures by CRC stage to develop a cost model.

- To compare overall costs between our cohort and the SEER control, the average initial cost of care was weighted by the stage-specific CRC incidence in each group.

Results: Demographics

- 682 patients (all high risk), 35 to 64 years old were screened, with 9 cancers identified.

- Colonoscopies were performed by a total of 23 gastroenterologists (18), general surgeons (2) and colorectal surgeons (3).

- Overall, the incidence of CRC in our cohort was 1.3%. 
## Results: Cohort vs. SEER

### Table 1. Distribution of CRC by Stage

<table>
<thead>
<tr>
<th>Stage</th>
<th>Cohort</th>
<th>SEER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
<td>11.1%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Stage 1</td>
<td>33.3%</td>
<td>22.2%</td>
</tr>
<tr>
<td>Stage 2</td>
<td>22.2%</td>
<td>30.5%</td>
</tr>
<tr>
<td>Stage 3</td>
<td>33.3%</td>
<td>22.0%</td>
</tr>
<tr>
<td>Stage 4</td>
<td>0%</td>
<td>14.5%</td>
</tr>
</tbody>
</table>
Results

- A total cost of $353,262 was estimated to be incurred during the initial phase of care.
- Compared to the SEER control, our cohort included more early stage cancers, and subsequently had a lower per patient initial cost ($39,251 vs $45,827, a 16% decrease).

<table>
<thead>
<tr>
<th>Stage</th>
<th>Cost of 1st yr of care</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$19,432</td>
</tr>
<tr>
<td>1</td>
<td>$29,746</td>
</tr>
<tr>
<td>2</td>
<td>$46,623</td>
</tr>
<tr>
<td>3</td>
<td>$50,449</td>
</tr>
</tbody>
</table>
What happens to CRC if we make screening available to all high risk individuals?

- We found a 1.3% CRC incidence rate in our study sample, which represents a 32.5-fold increase in CRC incidence over the general normal risk population.

- When compared to SEER data, we detected cancer earlier than would have been predicted.
Limitations

- Our sample size is small with less than 700 patients treated to date.

- Assumption that reported SEER-Medicare costs for CRC are accurate and valid representations of healthcare costs associated with the various stages of CRC.
What we Learned

- Our screening criteria successfully identified a high-risk population with an overall 1.3% incidence of CRC.

- For these patients, the provision of free screening colonoscopies not only identifies earlier stage tumors, but may decrease overall health care costs.
Top 10 Things to Know About Surgery on Sunday
Louisville, Inc

- We are from LOUISVILLE, KY (the most compassionate city in America)
- We are a nonprofit 501(c)3 founded in 2013
- We have saved LIVES
- We won an 80% by 2018 Community Organization Award in 2017
- We have since inspired communities in Indiana, Massachusetts, West Virginia and Georgia
Top 10 Things to Know About Surgery on Sunday
Louisville, Inc

- We see our mission as a matter of compassion
- We are a valued organization in our community
- In addition to free surgery, we offer a free clinic, it is a FQHC (250 referrals projected in 2018)
- We don’t have all the answers, sometimes we don’t have any
- We solve our problems together
How our business works

- Formed a nonprofit organization (IRS 501c3)

- COVINCED EVERYONE
  - Hospital administrators
  - Lawyers
  - Human Resources
  - Unit Managers
  - Billing Office
  - Doctors

University of Louisville
School of Medicine
How our business works

- Started SLOW

- Problem SOLVED
  - Formed partnerships with central credentialling organization
  - Obtained an organization specific malpractice insurance policy

- KEPT going NEVER quit REPEAT
THANK YOU!