“The function of protecting and developing health must rank even above that of restoring it when it is impaired.”  Hippocrates

Ernest Hawk, M.D., M.P.H.
VP for Cancer Prevention
T. Boone Pickens Distinguished Chair for Early Cancer Prevention
Head, Division of Cancer Prevention & Population Sciences
Director, Duncan Family Institute
Co-director, Cancer Prevention & Control Platform
MD Anderson’s Mission

To eliminate cancer in Texas, the nation and the world...

- Clinical Care
  - Individuals
- Research
- Education & Training
  - Future generations
- Cancer Prevention & Control
  - Community
Colorectal Cancer Screening in Texas

Texas Ranks 41st in the Percentage of 50+ Meeting CRC Screening Rec’s: 62.7%

Colorectal Cancer Stage at Diagnosis by Health Service Region, 2008-2012

<table>
<thead>
<tr>
<th>Region</th>
<th>In-Situ</th>
<th>Localized</th>
<th>Regional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>3.6%</td>
<td>34.8%</td>
<td>30.7%</td>
</tr>
<tr>
<td>1</td>
<td>4.0%</td>
<td>33.9%</td>
<td>33.5%</td>
</tr>
<tr>
<td>2/3</td>
<td>2.9%</td>
<td>34.0%</td>
<td>32.0%</td>
</tr>
<tr>
<td>4/5N</td>
<td>4.6%</td>
<td>38.0%</td>
<td>29.5%</td>
</tr>
<tr>
<td>6/5S</td>
<td>4.5%</td>
<td>32.5%</td>
<td>30.4%</td>
</tr>
<tr>
<td>7</td>
<td>2.9%</td>
<td>38.0%</td>
<td>30.3%</td>
</tr>
<tr>
<td>8</td>
<td>4.0%</td>
<td>34.5%</td>
<td>31.2%</td>
</tr>
<tr>
<td>9/10</td>
<td>4.6%</td>
<td>37.2%</td>
<td>28.2%</td>
</tr>
<tr>
<td>11</td>
<td>1.7%</td>
<td>36.2%</td>
<td>28.8%</td>
</tr>
</tbody>
</table>

Source: Prepared by the Texas Department of State Health Services, Cancer Epidemiology and Surveillance Branch, Texas Cancer Surveillance System.

Notes:
- This analysis is based on estimates of colorectal cancer screening rates from the Behavioral Risk Factor Surveillance System (BRFSS) and the National Health Interview Survey (NHIS) for the years 2008 to 2012.
- Estimates are based on a statistical model which combines information from the BRFSS and NHIS.
- The data includes all races, ages, and both sexes.

ACS: CRC Facts & Figures, 2017-2019; NCI & CDC State Cancer Profiles
FIGURE 1: Total Number Needed to be Screened for CRC to Reach 80% by 2018 by State

Figure from Zauber, AG, Meester, RG, Fedewa, S et al. (2016, May). The National Colorectal Cancer Roundtable Campaign to Screen 80% for Colorectal Cancer by 2018: Mapping Progress by State to Focus Screening Effort. Poster presented at the Digestive Disease Week conference, San Diego, CA.
Translational Research Phases Resulting in Evidence-Based Clinical & Public Health Actions to Drive Impactful Cancer Control

(Based in part on a drug-approval paradigm)

<table>
<thead>
<tr>
<th>Clinical research</th>
<th>FDA approval for drug therapies</th>
<th>Cancer control research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic and applied science research</td>
<td>Translation to humans</td>
<td>Translation to practice</td>
</tr>
<tr>
<td>Predclinical and animal studies</td>
<td>Translation to patients</td>
<td>Phase 4 clinical trials &amp; clinical outcomes research</td>
</tr>
<tr>
<td>Defining mechanisms, targets and lead molecules</td>
<td>New methods of diagnosis, treatment and prevention</td>
<td>Delivery of recommended and timely care to the right patient</td>
</tr>
<tr>
<td>T0</td>
<td>Safety/dosing</td>
<td>T3</td>
</tr>
<tr>
<td>Discovery</td>
<td>Clinical efficacy</td>
<td>T4</td>
</tr>
<tr>
<td>Translation from basic science to human studies</td>
<td>Use in clinic</td>
<td>Outcomes</td>
</tr>
</tbody>
</table>

Discover, develop & deliver safe, timely, effective, efficient, equitable, patient-centered or culturally-tailored (“STEEP”) programs to patients and the public (Institute of Medicine, 2007).

MD Anderson’s Cancer Control Platform

Develop and deliver comprehensive evidence-based strategies (PES) in cancer prevention, screening, early detection and survivorship to achieve a measurable and lasting reduction in the cancer burden, especially among **the underserved**.

<table>
<thead>
<tr>
<th>Actions</th>
<th>Expertise</th>
<th>Partners</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policies</strong></td>
<td>Gov’l Relations</td>
<td>UT Sister Institutions</td>
<td>Grants</td>
</tr>
<tr>
<td></td>
<td>Health Policy</td>
<td>Public Education</td>
<td>• CPRIT</td>
</tr>
<tr>
<td></td>
<td>Professional Education</td>
<td>Professional Education</td>
<td>Medicaid 1115 Waiver</td>
</tr>
<tr>
<td><strong>Education – public &amp; professional</strong></td>
<td>Public Education</td>
<td>Harris Health &amp; LBJ Hospital</td>
<td>Institutional</td>
</tr>
<tr>
<td><strong>Services beyond MD Anderson’s walls</strong></td>
<td>Professional Education</td>
<td>FQHCs &amp; CHCs</td>
<td>Philanthropic</td>
</tr>
<tr>
<td></td>
<td>D&amp;I of Community-based Services</td>
<td>TX Dept State Health Svsc</td>
<td>• Corporate</td>
</tr>
<tr>
<td></td>
<td>• Tobacco cessation</td>
<td>Cancer Alliance of Texas</td>
<td>• Individual</td>
</tr>
<tr>
<td></td>
<td>• Nutrition</td>
<td>Texas Medical Association</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Physical activity</td>
<td>Local &amp; nat’l health coalitions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cancer screening</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Vaccination</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Colorectal Cancer: Reduce Your Risk

- Educates on CRC screening exams, risk factors, preventive behaviors
- Presented in 1-3 sessions
  - “Colorectal cancer 101”
  - Healthy cooking demonstration
  - Physical activity class
- Also available in English, Spanish & Vietnamese
- Conducted 39 programs reaching 1,134 people in FY17
  - Outcome: 67% report they intend to get a screening test as result of program
  - Cost: $2 per participant, not incl. staff salaries
  - Attendance: 73% Hispanic, 20% Asian, 2% African American; 65% uninsured

Information & data provided by Stephanie Kim, Director; Community Relations & Education, Strategic Communications, MD Anderson
MD Anderson Program to Increase CRC Screening Services for Poor & Underserved Communities

Program Components

- Partnerships: FQHCs & CHCs
- Patient education - culturally- & linguistically-tailored
- EHR reminder systems
- Clinician/staff education - to identify eligible pts. based on clinical & financial criteria
- Standing orders
- Take-home FIT test (results to clinic & MDACC)
- Patient navigation
- Referral to community endoscopists for diagnosis
- Funded thru Medicaid Waiver & CPRIT prev. grant
- Medicaid Health Plan (Community Health Choice – credentialing, claims) as Third Party Administrator

Eliminates financial barriers by covering cost of endoscopy & polypectomy

Project Staff Navigation Responsibilities

- Partner with ACS team to deliver pt. education
- Track FITs distributed & returned
- Navigate pt referrals for evaluation of + tests to community GIs for colonoscopy/polyp removal
- F/U pts diagnosed with polyps to arrange further assessment
- Navigate pts diagnosed with cancer to treatment
- Data analysis & reporting to funding agency
- Provide audit & feedback to clinics
MD Anderson CRC Screening Partner Map

Alliance for Colorectal Cancer Control Testing (ACT) and Medicaid 1115 Waiver Service Area

Clinics
- Medicaid 1115 Waiver Service Area
- ACT Service Area
Colorectal Cancer Screening - Metrics to Date

Navigation & practice change expanded into 20 clinic systems with 68 sites

<table>
<thead>
<tr>
<th>Project &amp; Funding Source</th>
<th>FIT-FLU (CPRIT-funded Project)</th>
<th>1115 Waiver Project (43 sites)</th>
<th>ACT (CPRIT-funded Project – 25 sites)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total FITs Distributed</td>
<td>900</td>
<td>17,473</td>
<td>3,999</td>
<td>22,372</td>
</tr>
<tr>
<td>Total Returned</td>
<td>576 (64%)</td>
<td>11,996 (68.7%)</td>
<td>2562 (64%)</td>
<td>15,134 (67.6%)</td>
</tr>
<tr>
<td>Number Positive</td>
<td>22 (3.8%)</td>
<td>722 (6.0%)</td>
<td>194 (7.6%)</td>
<td>938 (6.2%)</td>
</tr>
<tr>
<td>Colonoscopies Completed</td>
<td>20</td>
<td>460</td>
<td>113</td>
<td>593</td>
</tr>
<tr>
<td>Pts with Polyps Removed</td>
<td>8</td>
<td>264</td>
<td>42</td>
<td>314</td>
</tr>
<tr>
<td>Cancers Diagnosed</td>
<td>1</td>
<td>35</td>
<td>7</td>
<td>43</td>
</tr>
</tbody>
</table>
Challenges in Providing CRC Screening Services to Rural & Underserved Populations in Texas

- Cultural misalignment
- Transportation concerns
- Lack of support for CRC screening in the uninsured
  - CPRIT funds screening, but not diagnostic or treatment services
- Few specialists & facilities equipped to perform endoscopies
- Specialists may not accept reimbursement rates
- Limited financial assistance for treating uninsured & low-income patients
- No financial assistance for unauthorized patients
Connects MD Anderson experts with community providers serving underserved populations to promote skill development & raise self-efficacy in novel areas of medical practice

- Weekly/monthly videoconferences (45 min cases, 15 min didactic)
- Community providers present cases (e.g., patient histories, lab results, treatment plans, challenges)
- Feedback and guidance provided by MD Anderson’s (or partners’) specialists
- Community providers & specialists forge stronger working relationships toward the shared goal of high-quality care delivery
MD Anderson’s ECHO Projects

**Launched**
- Survivorship
- Palliative Care
- Pathology

**Expanding**
- Cervical Cancer Prevention- Texas-Mexico Border
  - ECHO Zambia
  - ECHO Mozambique
  - ECHO Latin America
  - ECHO Tobacco Cessation

**Exploring**
- Tobacco Cessation Latin America
- Pharmacy in Zambia
- Radiation therapy

**Participants**
- Dr. Sriram Yennu
  - Palliative Care
- Dr. Lewis Foxhall
  - Survivorship
- Dr. Mary Edgerton
  - Pathology
- Dr. Kathleenn Schmeler
  - Cervical Screening
- Dr. Shon Black
  - Breast Surg. Oncology
- Dr. Irene Tami-Maury
  - Tobacco Cessation
- Dr. Janice Blalock
  - Tobacco Cessation
- Dr. Oliver Bogler
  - GAP
- Dr. Anuja Jhingran
  - Radiation Therapy
Suggestions for ACS/NCI/CDC to Promote CRC Screening in NCI-designated Cancer Centers

- Clearly define and communicate the difference between D&I research vs. D&I actions (control)
- Strengthen the current “Community Outreach & Engagement” section of the CCSG core grant
  - Clarify criteria (e.g., focus on disparities of all types; integrated actions, not research alone)
  - Outline “best practices” (e.g., partnerships with FQHCs)
  - Establish metrics/expectations
  - Work with CDC and/or other federal agencies to fund such actions (transitioning CCSG to a collaborative, cross-agency program)
- Advocate for:
  - More funding of cancer control, not “just” cancer research
  - A national cancer control plan, establishing clear national goals and priorities across administrations
  - Coverage for cancer screening (incl. CRC) for all, not just those with insurance
  - Commercial EHR vendors to build patient/provider reminder systems into their products
- Develop and disseminate patient/provider screening decision-support materials