



2020 LEAD Capstone Poster Session

Development of an Integrated Cardio-Oncology
Program at UT Southwestern Medical Center

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Abstract

- **Problem:** revolutionary cancer therapies have improved survival considerably, but they pose the risk of cardiotoxicity – a leading cause of death in certain cancers. Cardiovascular disease (CVD) risk and complications are of rampant proportions. Only in North Texas there are >30,000 patients with new cancer diagnosis every year and >300,000 cancer survivors, with a 2-6 fold increase in CVD risk.
- **Action:** Cardio-Oncology is emerging as a new subspecialty to address proactively these problems and key steps are necessary to develop such an integrated program:
 1. Recruitment of specialized clinical faculty to meet the growth in community needs
 2. Integrate research efforts, including clinical registry, biobank, medical informatics, research faculty
 3. Establish a training program for the new generation of specialists
- **Results:** this is an opportunity for our institution to make a major difference along 5 objectives:
 1. Provide outstanding care to a large population with cancer and heart disease
 2. Afford cutting-edge cardiovascular prognostication that is presently unavailable to them
 3. Increase the profile and patient volumes of our Comprehensive Cancer Center
 4. Accomplish unique research initiatives
 5. Educate the next generation of cardio-oncology clinicians and investigators



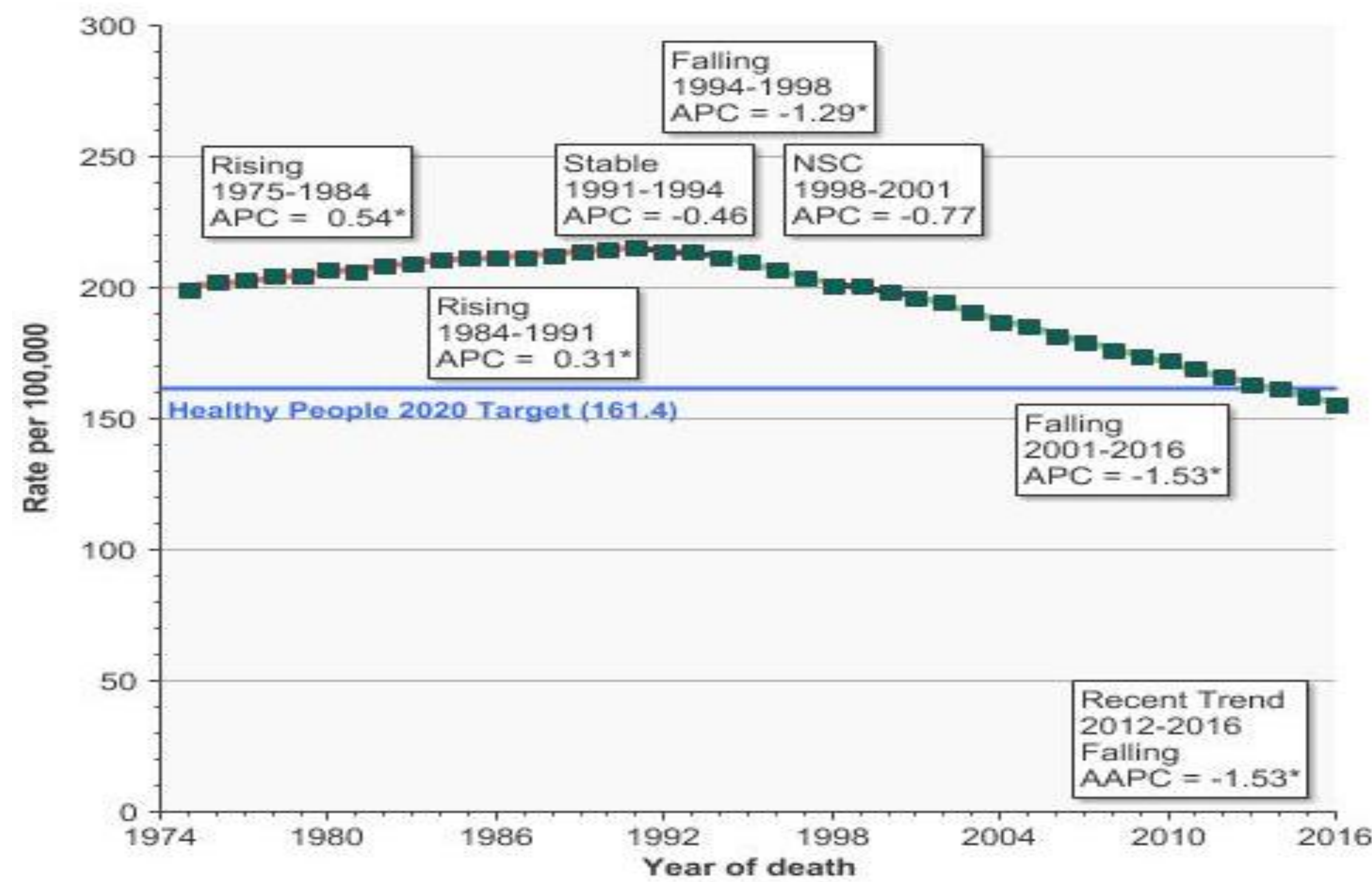
Objectives

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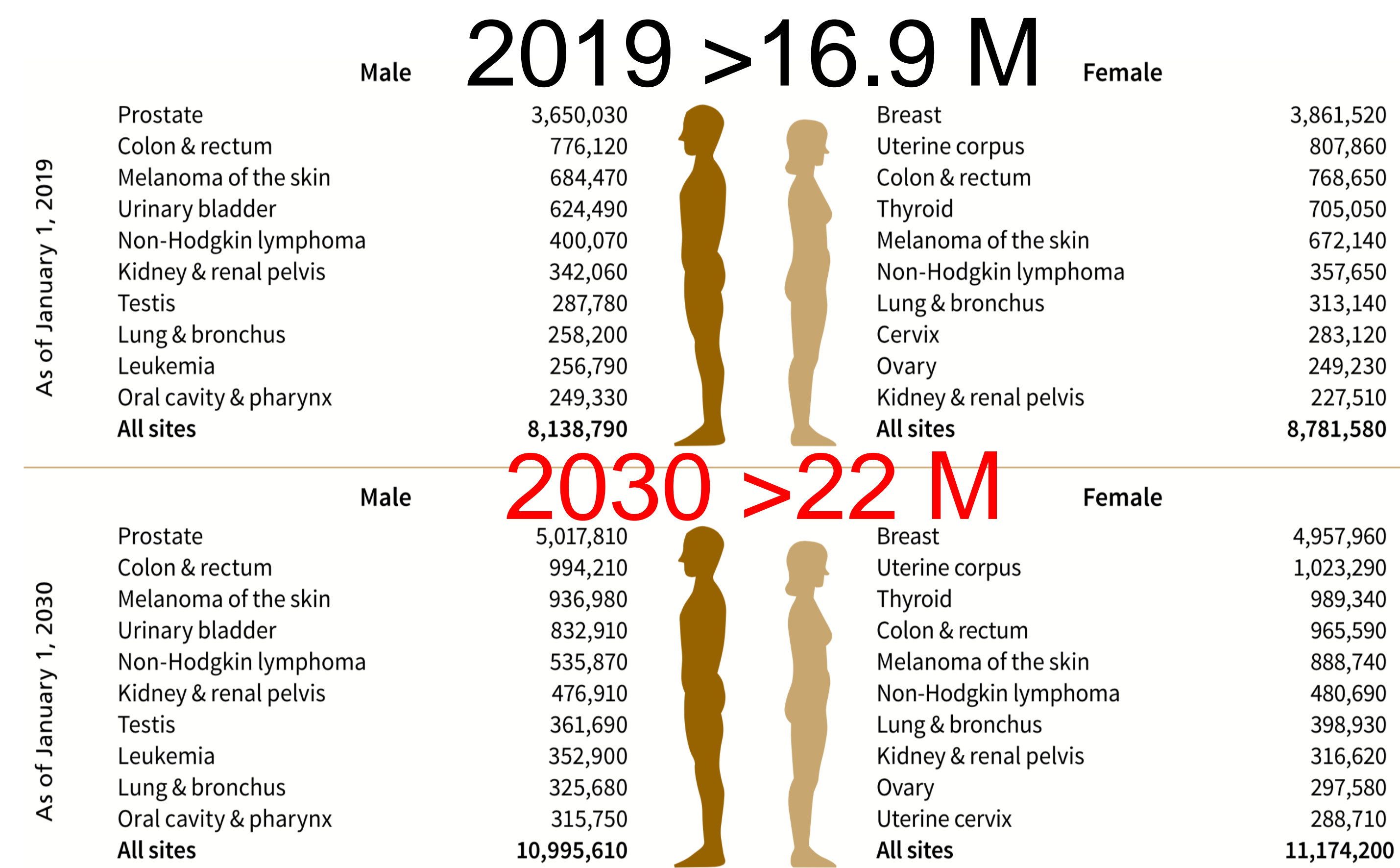


Background Information

US Death Rates for all Cancers 1975-2016

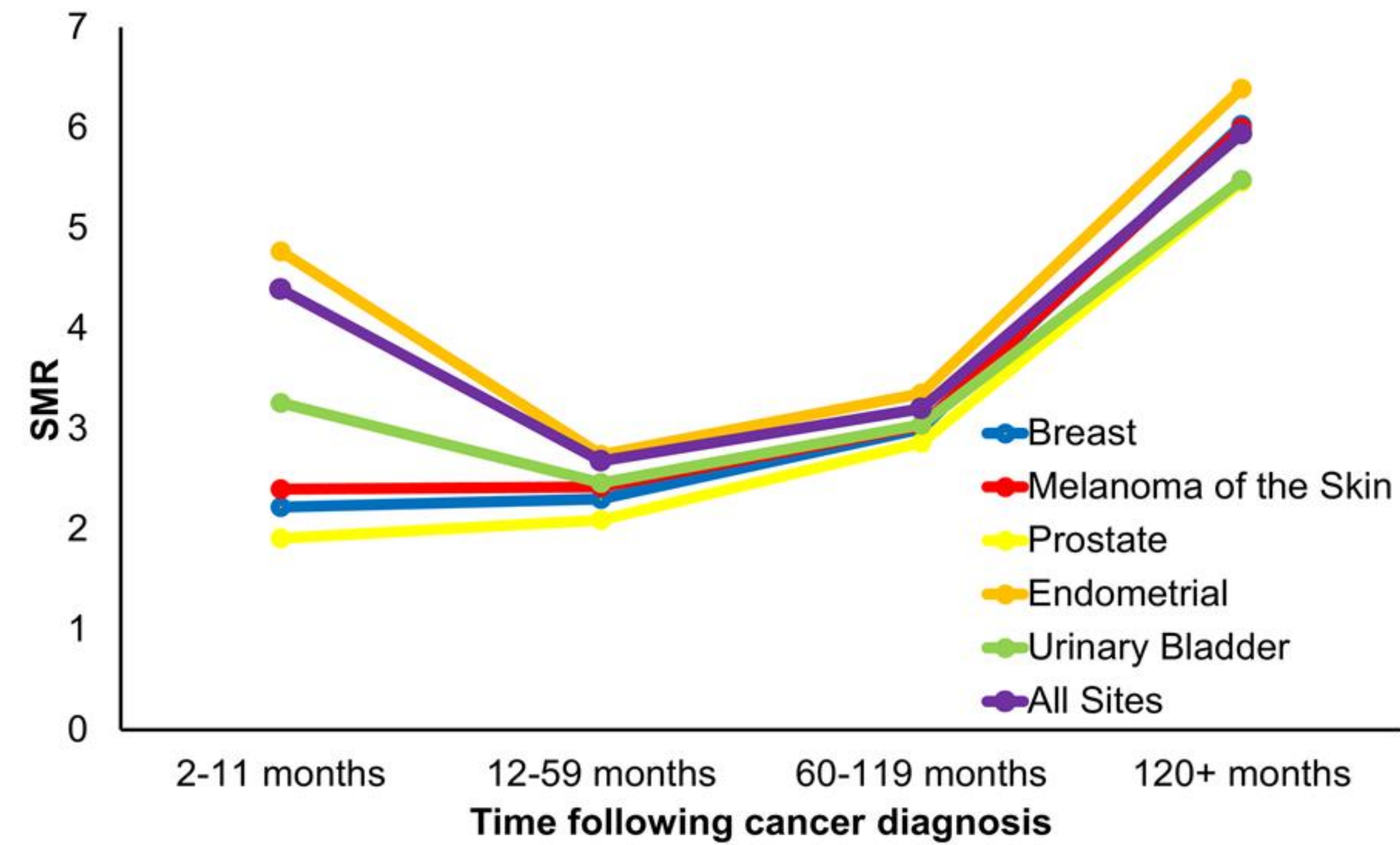


Estimated US Cancer Survivors

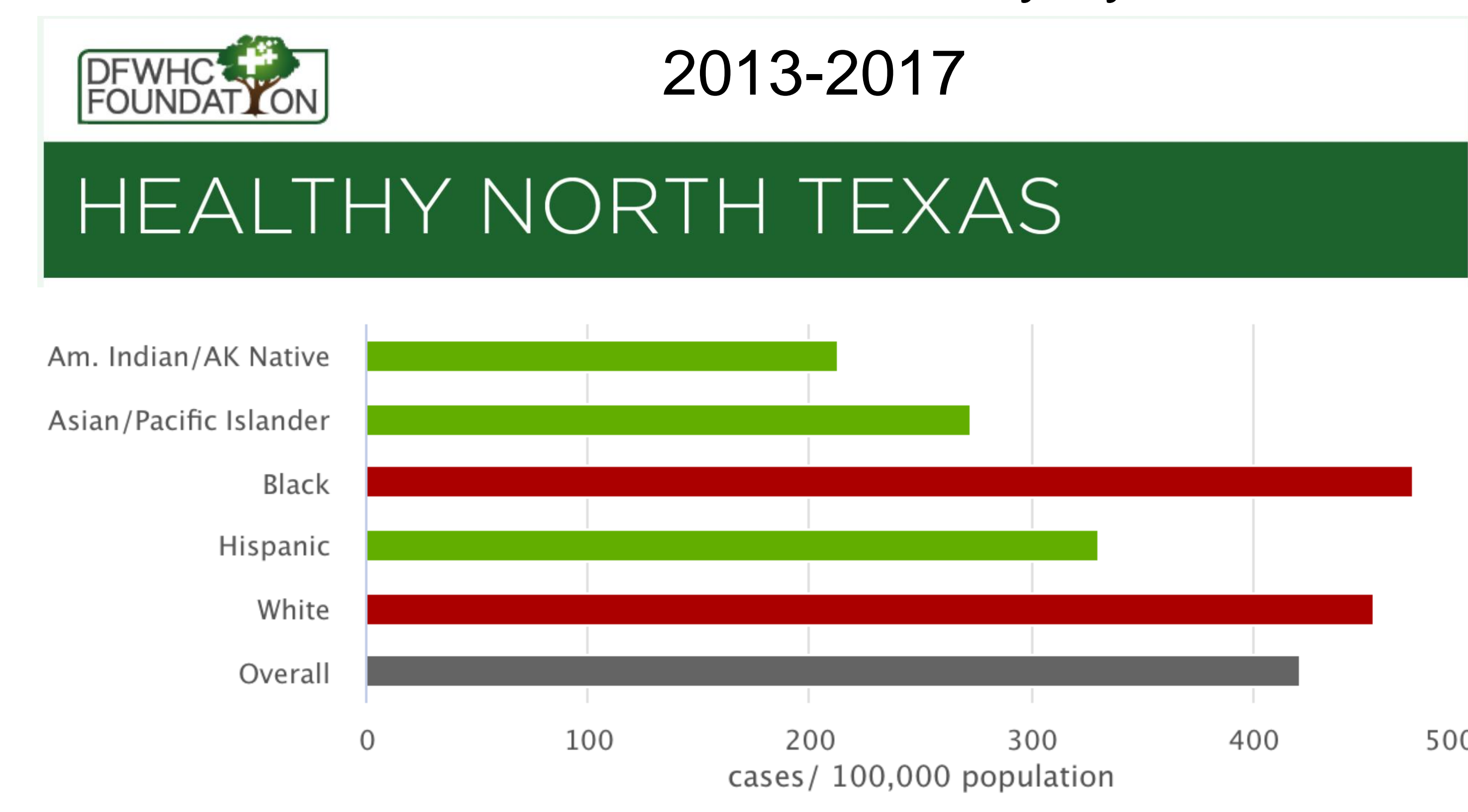


- Major effect of CVD on overall cancer outcomes
- Cardiotoxicity - lag in cardio-oncology guidelines uptake
- Exacerbated CVD risk in survivors of childhood cancer lost in transition to adult care
- Social disparity in cancer and CVD diagnosis and management

2000-2015 Risk of Death from Heart Disease



All Cancer Incidence Rate Dallas County by Race/Ethnicity



References 1-4



Specific Aims

- **Clinical**

- Develop patient-centered Cardio-Oncology resources integrated in the Cancer Center
- Establish an inpatient Cardio-Oncology consult service
- Outreach, educate providers and general patient population

- **Research**

- Expand the current translational and clinical studies
- Institutional clinical registry, biobank, multidisciplinary studies

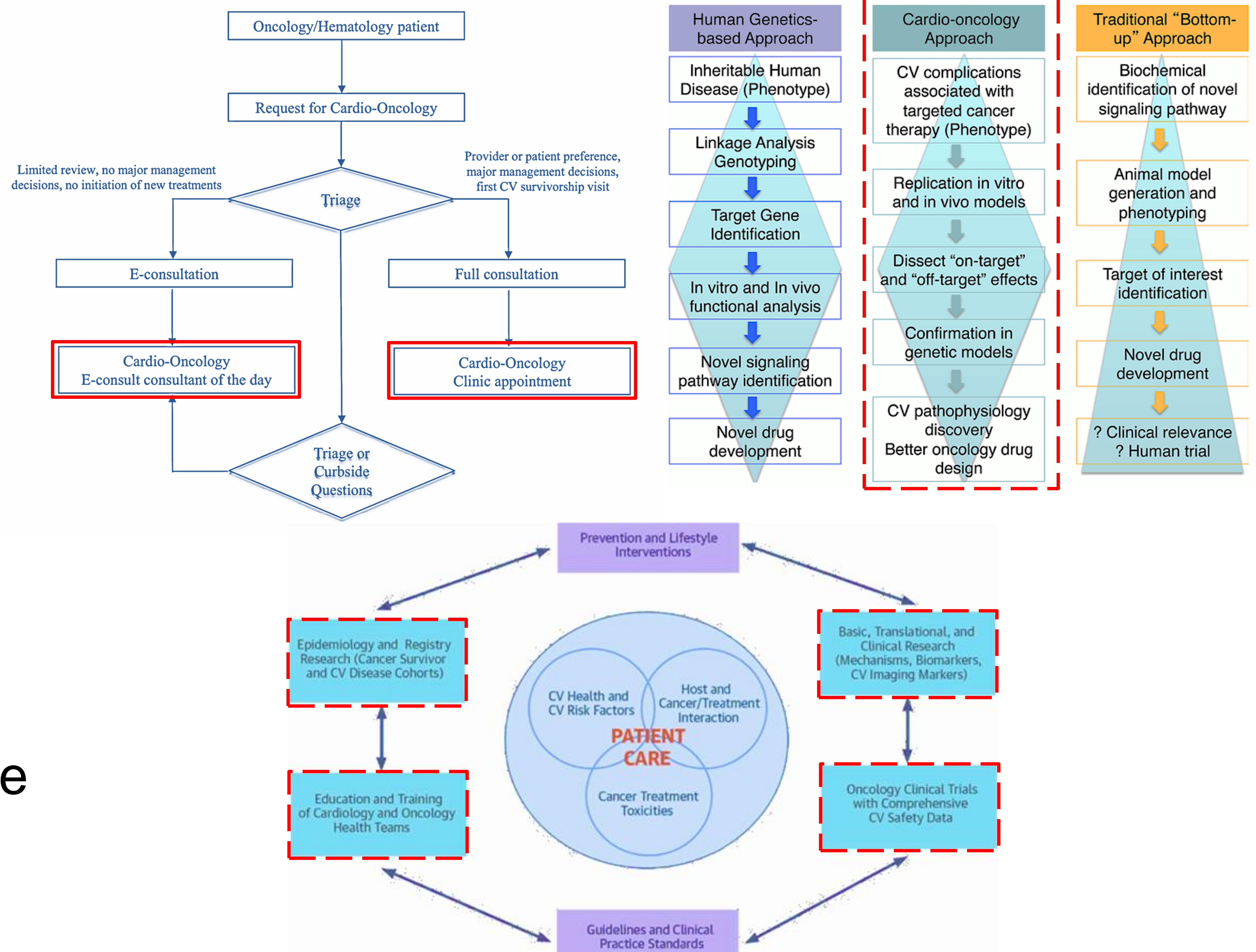
- **Education**

- Establish a structured Cardio-Oncology fellowship training



Project Plan

- Stage 1: define the need, scope and mode of cardio-oncology program
- Stage 2: seek institutional support, develop infrastructure and communication
- Stage 3: implement the program, with commitment for continuous excellence



References 5-13



Application of What You Learned at LEAD

- Leadership abilities:
 - Articulate a vision
 - Inspire others
 - Coach, give guidance
- Institutional networking
 - Values
 - Structure
 - Resources
- Identifying personal and team strengths and enabling the team members to work at their full potential



Proposed Budget

- Stage 1 – outpatient clinic 2016-2019, MD + RN, 0.3 FTE
- Stage 2 – transition to program
 - Recruitment MD, APP, RN, sonographer completed 2019-2020
 - ✦ In process: additional MD recruitment, to join 2021
 - Proposed clinical team expansion:
 - ✦ 2021: medical director 0.1 FTE, additional APP and RN
 - ✦ 2022: additional MD and sonographer
 - Proposed research institutional support:
 - ✦ Biobank, biorepository: research coordinator/RN 1 FTE, research analyst 1 FTE, research technician 1FTE, biosample storage space
 - ✦ Lab space and start-up package for physician-scientist team



Innovation and Significance

- Unique resource for patients in North Texas
- Clinical and research center of excellence
- Lead nationally in the education of the next generation of specialists



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