



PROSTATE CANCER TREATMENT IN A COMMUNITY SETTING

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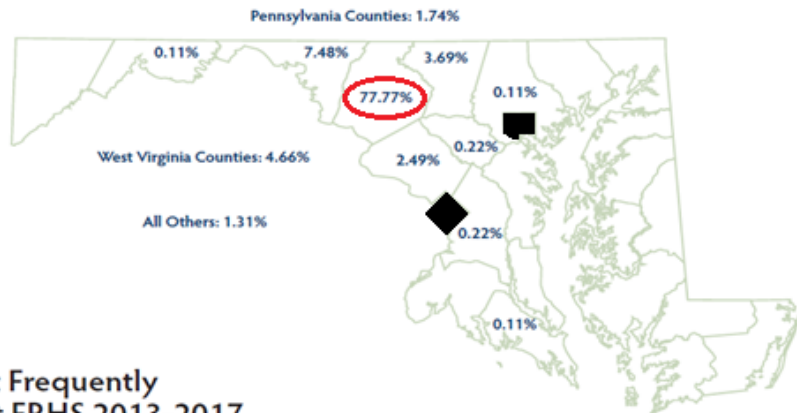
MEDICAL DIRECTOR, RADIATION ONCOLOGY AND CYBERKNIFE

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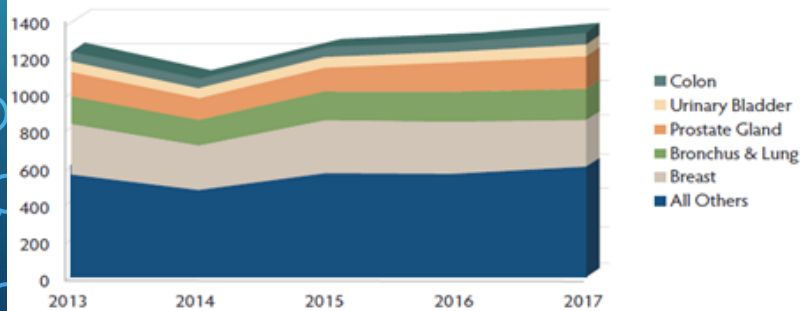
FREDERICK MARYLAND

LOCAL DEMOGRAPHICS - FREDERICK MARYLAND

County at Diagnosis for Patients Diagnosed in 2017*
*Analytic Cases Only

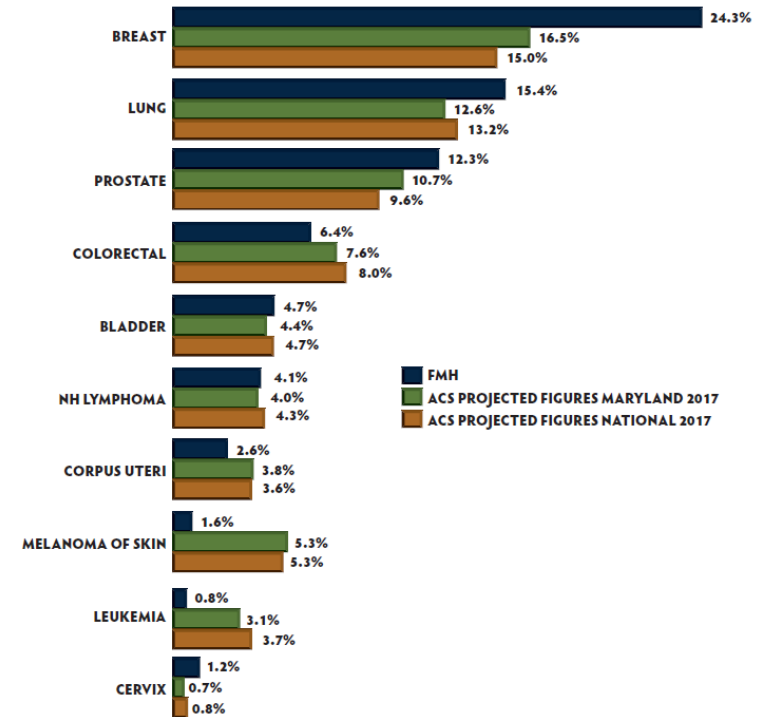


Five-Year Trend of Most Frequently Diagnosed/Treated Cancers at FRHS 2013-2017



Comparison of the Incidence of Selected Cancer Sites:

FMH/MD/National Rates 2017



KEYS FOR A SUCCESSFUL COMMUNITY ONCOLOGY TREATMENT PROGRAM

ADMINISTRATIVE SUPPORT

- Physical plant costs are significant
 - Some expenses are necessary
 - Some are duplicative
- Aggressive recruitment of committed Medical Professionals
- Retention of Medical Professionals
 - Frequent distrust of Administration by Physicians



KEYS FOR A SUCCESSFUL COMMUNITY ONCOLOGY TREATMENT PROGRAM

COMMUNITY SUPPORT

- The Community, ideally, should share in some of the costs
 - Indicates local confidence in the program
 - Indicates a potential unmet need

KEYS FOR A SUCCESSFUL COMMUNITY ONCOLOGY TREATMENT PROGRAM

PHYSICIAN SUPPORT

- Near-comprehensive care
 - 24/7 available specialized care
 - Restrict to medical situations where available expertise and support are available
- Itinerant specialists
 - Liver resections
 - Rectal Cancer surgery
 - Hepatic radioembolization
 - GYN Oncology
- Referral to Academic Centers

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NEAR-COMPREHENSIVE ONCOLOGY SERVICES

- Center for Breast Care
- Center for Chest Disease
 - Lung Cancer Screening Program
- Head and Neck Cancer Program
- Radiation Oncology
- Surgical Oncology
 - Urologic Oncology
 - Colorectal Surgery
 - HIPEC
- Oncology Care Consultants
- Imaging Services
- Infusion Center
- Cancer Registry
- Clinical Trials
- Genetic Counseling
- Lymphedema and Rehabilitation Program
- Nutrition Services
- Integrative Therapies
- Fitness and Nutrition for Survivors (FANS)
- Pain and Supportive Care Services/Hospice
- Pathology and Clinical Laboratory
- Tumor Board/Cancer Conferences
- Supportive Services/Support Groups

2017 MULTIDISCIPLINARY CANCER CONFERENCES

Conference	Number of Conferences	Patients Presented
General Tumor Board	18	72
GYN Tumor Board	6	23
Breast Cancer Conference	39	405
Head & Neck Cancer Conference	16	113
CyberKnife Conference	17	255
Totals	96	868

FREDERICK REGIONAL HEALTH CANCER PROGRAM

CERTIFICATIONS

- MD Anderson Certified Member of the MD Anderson Cancer Network
- ACR - American College of Radiology Certification
- ACR Breast Imaging Center of Excellence
- QOPI/QCP Certification - Quality Oncology Practice Initiative
- NAPBC - National Accreditation Program for Breast Centers

CLINICAL TRIALS

- NRG Oncology
- ECOG-ACRIN
- Alliance for Clinical Trials in Oncology
- Southwest Oncology Group (SWOG)
- Pharmaceutical-sponsored research studies

COMMUNITY OUTREACH PROGRAMS

- Education
- Screening
- Uncompensated Care

PREVENTION, EDUCATION AND AWARENESS PROGRAMS

- Free Yoga Demos
- Free Zumba Fitness Demos
- Health Food Demonstrations
- Party with a Purpose Fitness Event
- Protect the Skin You're In
- Roundtable Discussion on Colorectal Health
- Disparities in the Black Community
- Tobacco Cessation Classes/Support Group
- Transitioning to Survivorship Workshop
- Women's Health Expo
- Adult Weight Loss Programs
- Annual Breast Cancer Symposium
- Annual Lung Cancer Symposium
- Bridges Lay Health Education Program
- C IT Through: Colonoscopy, Changing Diet, Colon
- Cancer Prevention and Cure
- Fitness and Nutrition for Survivors
- Free BANG Power Dance Demos
- Free Barre Demos
- Free Strength Training Demos

SCREENING AND EARLY DETECTION PROGRAMS

- Breast Cancer Risk Screening Program
- Frederick Community Health Fair Screenings
- Lung Cancer Screening Program
- Mammography Nights

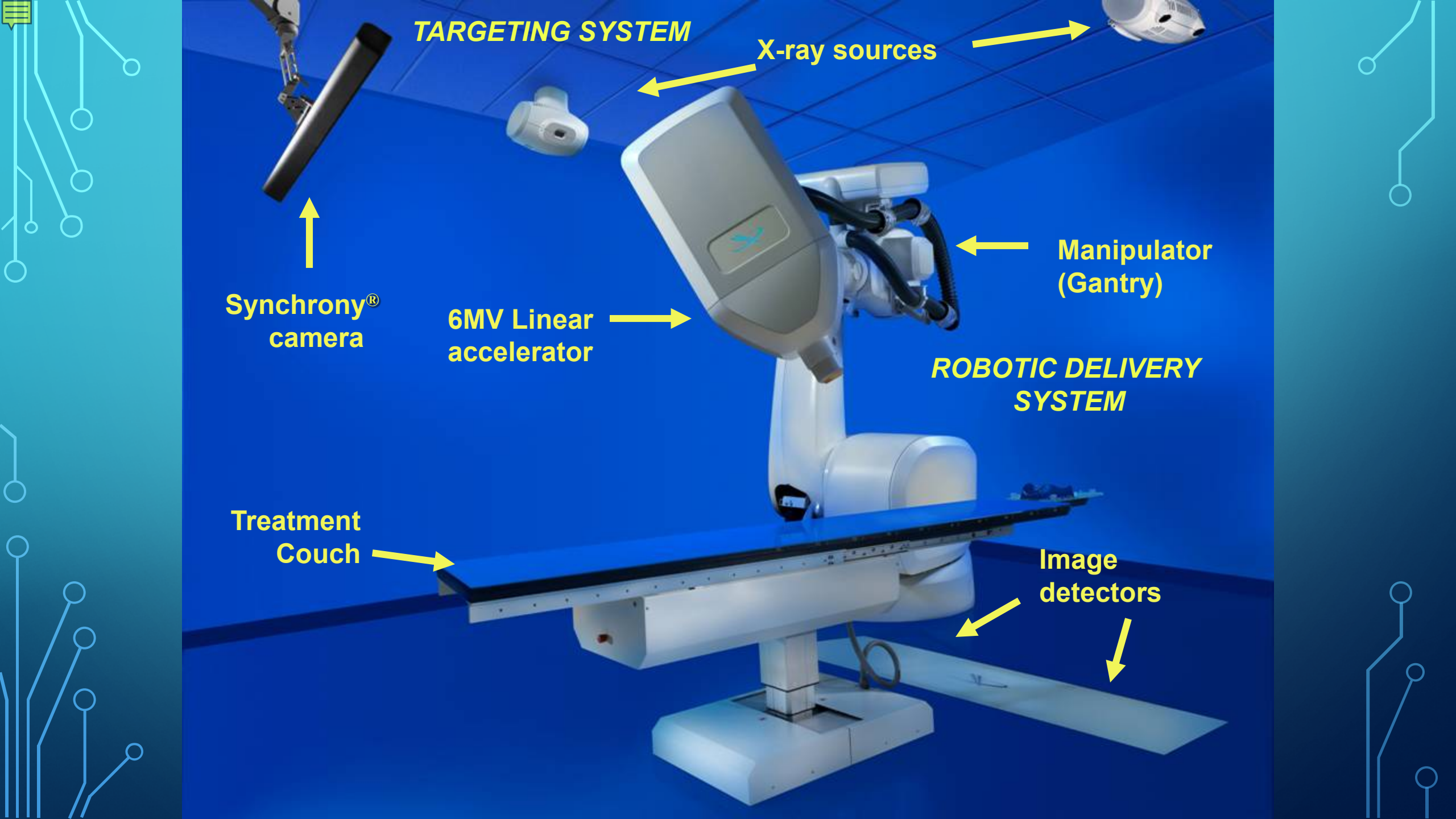
SUPPORT GROUPS AND PROGRAMS

- Prostate Cancer Support Group
- BRCA Support Group
- Camp Jamie
- Evening Grief Support
- FCC Breast Cancer Support Group
- Frederick Area Ostomy Support Group
- Frederick Prostate Cancer Support Group
- Hospice 101
- Look Good, Feel Better
- National Cancer Survivors Day
- On Living and Dying Well
- Parent Grief Support Group
- Spousal/Partner Grief Support Group
- Support for People with Head and Neck Cancer
- (SPOHNC)

KEYS FOR A SUCCESSFUL COMMUNITY ONCOLOGY TREATMENT PROGRAM

A WELL-FUNCTIONING CANCER COMMITTEE

- Review outcomes
 - Set quality standards
- Insure compliance with Accreditation bodies
- Make recommendations to Administration
- Set goals
 - Reduce health disparities



TARGETING SYSTEM

X-ray sources

**Synchrony®
camera**

**6MV Linear
accelerator**

**Manipulator
(Gantry)**

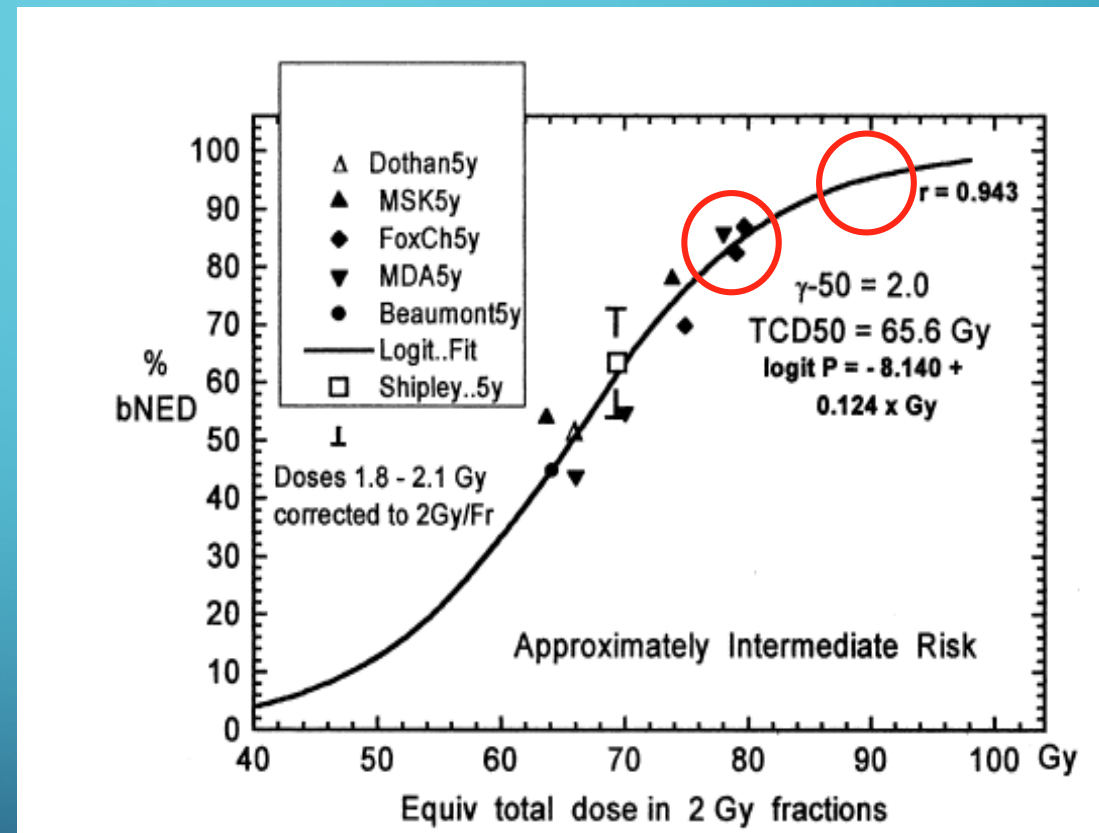
**ROBOTIC DELIVERY
SYSTEM**

**Treatment
Couch**

**Image
detectors**

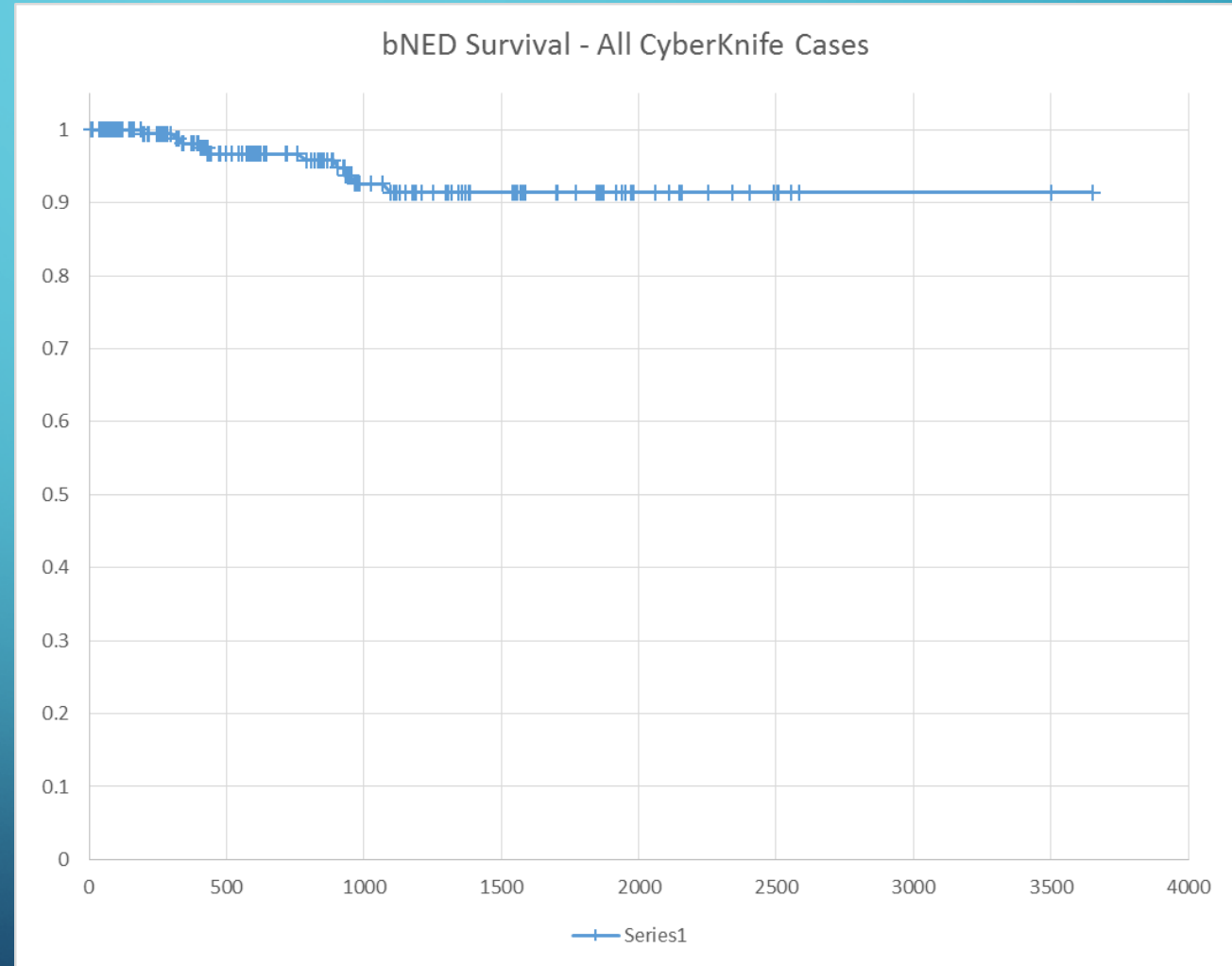
RADIATION DOSE RESPONSE CURVE – PROSTATE CANCER

- IMRT (1.8Gy x 43 fractions)
fractions)
 - 5-year tumor control (bNED) is ~85%
- CyberKnife (7.25Gy x 5 fractions)
 - 5-year tumor control (bNED) should be ~93%



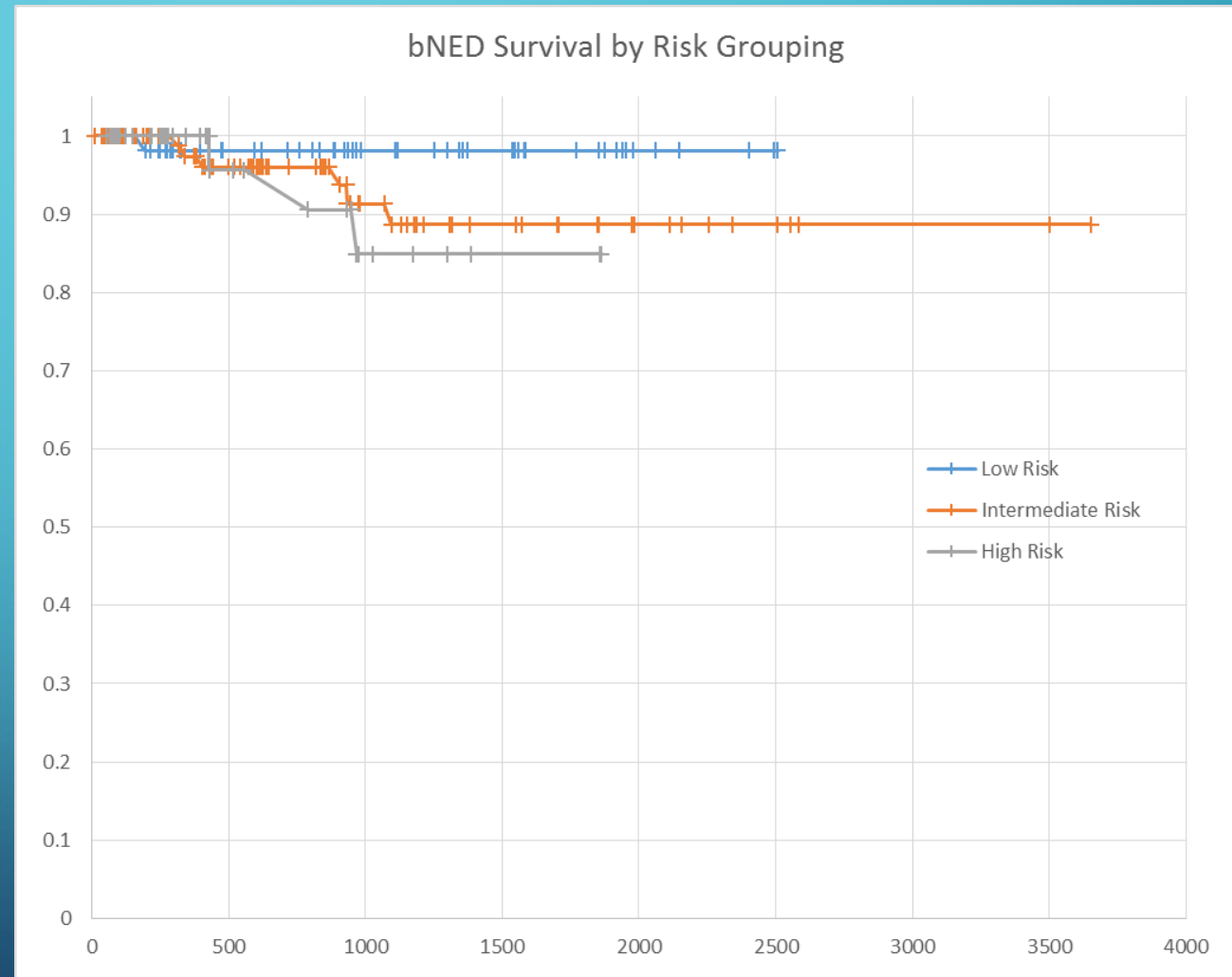
RESULTS – CYBERKNIFE FOR LOCALIZED PROSTATE CANCER

- First 250 patients treated in Frederick with CyberKnife SBRT
- Monotherapy - 725cGy x 5
- Boost - 600cGy x 3 after 5040cGy XRT



RESULTS – CYBERKNIFE FOR LOCALIZED PROSTATE CANCER

- Low Risk – PSA < 10, Gleason 6, T1-T2a
- Intermediate Risk – PSA 10-20, Gleason 7, T2b-T2c
- High Risk – PSA > 20, Gleason 8-10, T3-T4



CYBERKNIFE PLANNING IMPROVEMENTS OVER THE YEARS

