

Prostate Cancer Screening



Summit Healthcare Wellness Program

- Agenda
 - Introductions
 - Overview of prostate cancer screening
 - Panel Discussion with Q & A

Physicians

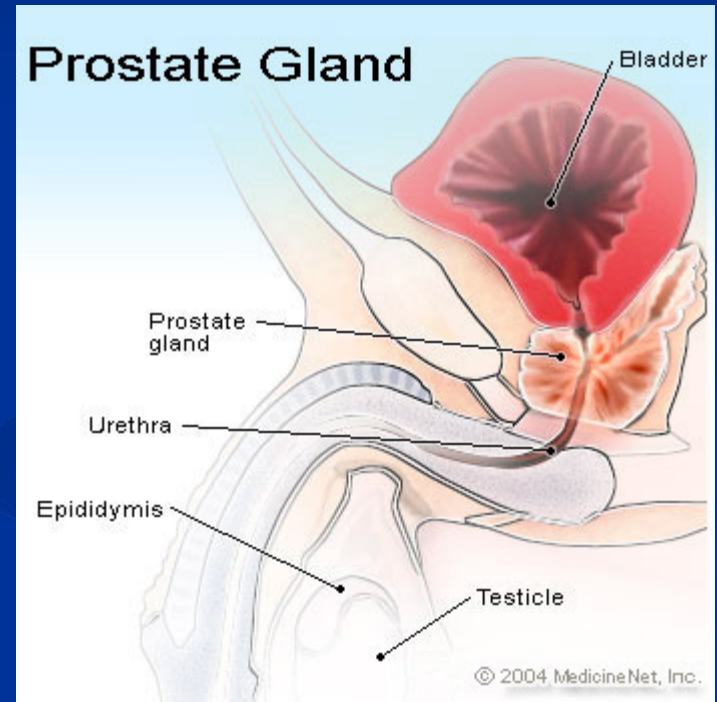
- Dr. Snehal Thakkar – Medical Oncology
- Dr. Richard Cambareri – Medical Oncology
- Dr. Victor Henderson – Radiation Oncology
- Dr. Peter Niemczyk - Urology

Why not simply screen everyone?

- Complications
- Anxiety
- Overdiagnosis
- Economics

Prostate

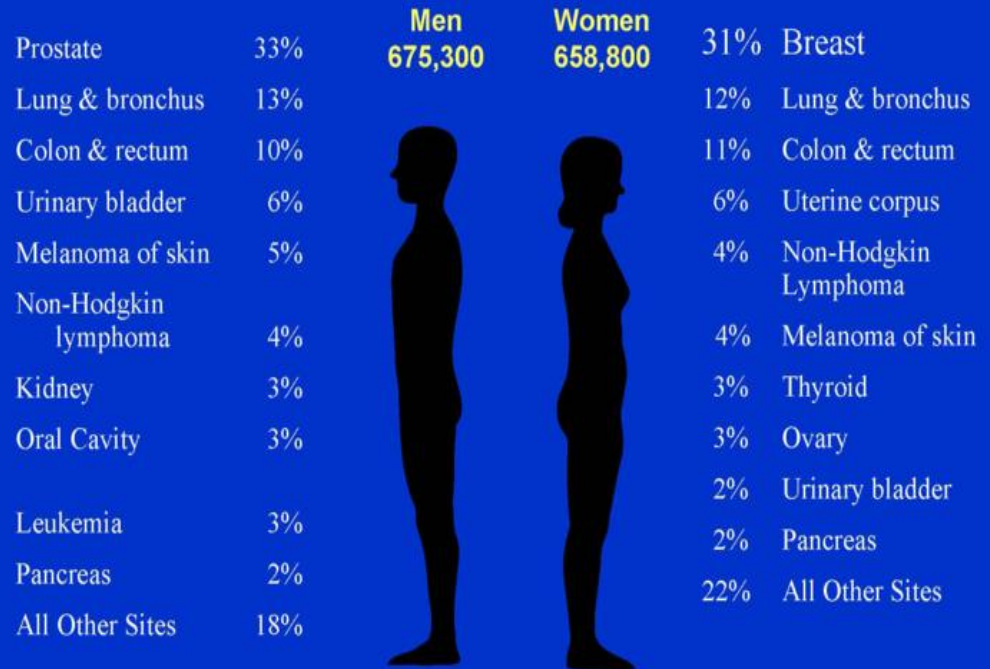
Prostate is an organ forming part of the male reproductive system. It is about the size of a walnut and is doughnut shaped and surrounds the urethra.



Prostate Cancer

- Most frequently diagnosed malignancy after skin cancer
- Leading cause of cancer death in male
 - Incidence - 166/100K men
 - Mortality - 24/100K men

2006 Estimated US Cancer Cases*



*Excludes basal and squamous cell skin cancers and in situ carcinomas except urinary bladder.
Source: American Cancer Society, 2006.

Prostate Cancer Risk Factors

■ Age

- Median age diagnosis - 67 years
- Median age death - 81 years

■ Race

- AA with highest incidence

■ Family History

- Risk increase by 2X with 1st degree relative diagnosed with prostate cancer

What's next?

- Identify people with the disease
- Screening test
 - Identify as many people as possible that may have the disease and have very few false negatives

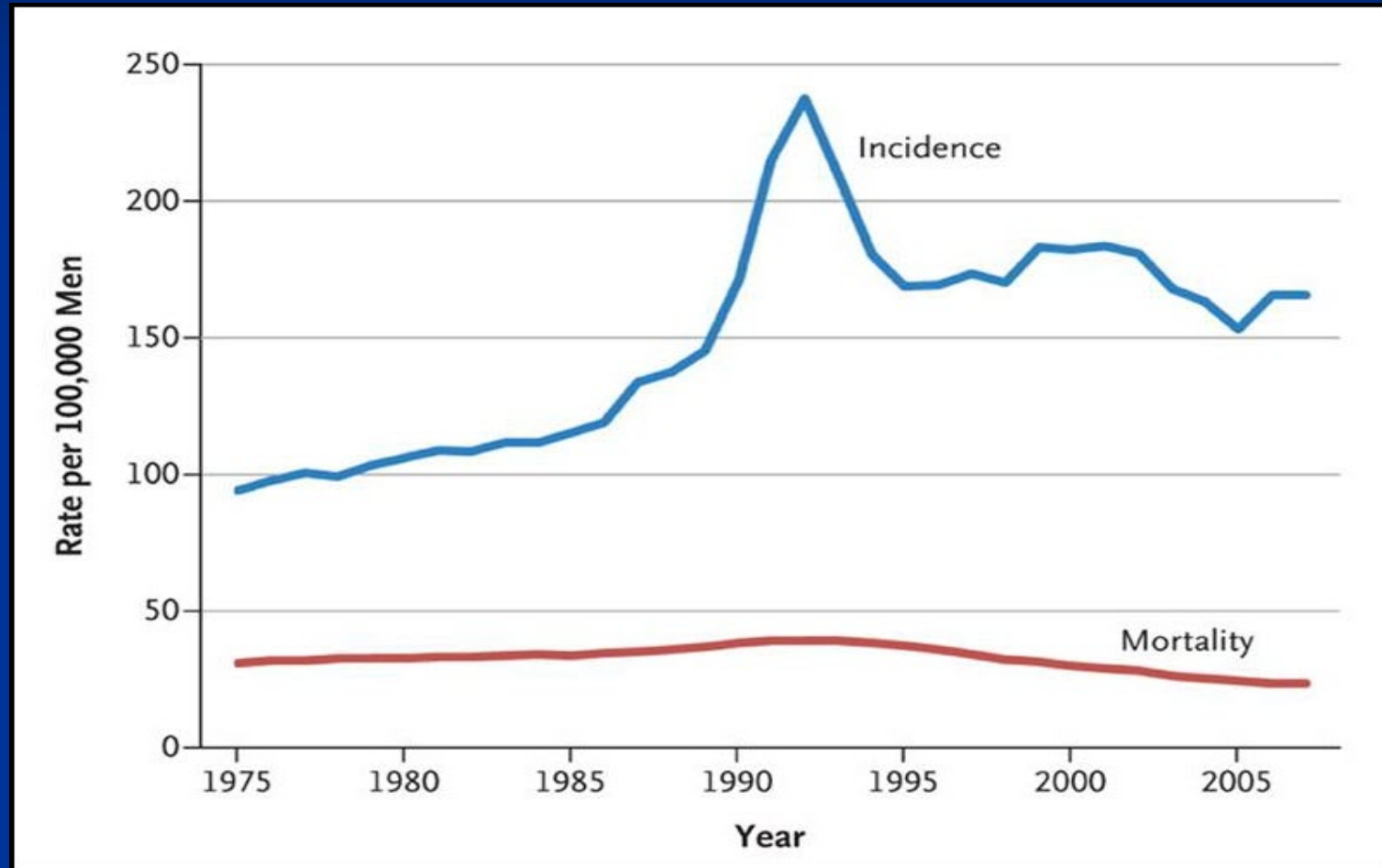
How do we screen?

- Rectal Exam (DRE)
 - Advantages
 - Instant information
 - Disadvantages
 - Unpleasant for the patient
 - Interexaminer variability
 - Diagnosed cancers via this method are typically advanced stage
- PSA
 - Advantages
 - Earlier diagnosis
 - Disadvantages
 - Lab draw
 - What to do with the information

How important is screening?

- 90% prostate cancers diagnosed with screening
- Lifetime risk of developing prostate cancer increased from 9% (1985) to 16% (2007)
- Decrease mortality
 - Supported by case control data
 - SEER results

Age adjusted mortality



Not So Fast

- Results from 2 large multicenter studies were less than conclusive
 - PLCO study – no benefit from screening
 - ERSPC – minimal benefit from screening

ERSPC – European Randomized Study of Prostate Cancer

PLCO – Prostate, Lung, Colorectal, and Ovarian Cancer Screening

Randomized Controlled Trials

	ERSPC		PLCO	
	Screening	Control	Screening	Control
Age	55-69		55-74	
Subjects	72890	89353	38343	38350
Screening	PSA every 4 years		PSA annually	
Follow up	9 years		7 years	
Prostate cancer deaths	214	326	50	44
Number to diagnose to prevent one prostate cancer death	48		---	

ERSPC – European Randomized Study of Prostate Cancer

PLCO – Prostate, Lung, Colorectal, and Ovarian Cancer Screening

Results

■ ERSPC

- Diagnosis of prostate cancer was different in two groups - 8.2% (screened) v 4.8% (not screened)
- Mortality diminished 20% in screened group ($p=0.04$)
 - Absolute difference was 0.71 deaths per 1000 men
- 48 new diagnosis to prevent 1 death

■ PLCO

- No mortality benefit from screening

Guidelines

Table 2. Prostate-Cancer Screening Guidelines.^a

Recommendation	American Urological Association	American Cancer Society	U.S. Preventive Services Task Force
Shared decision making between patient and clinician	Yes	Yes (consider use of decision aid)	Yes (when patient requests screening)
Age to begin offering screening — yr			
Average-risk patients	40	50	Not applicable
High-risk patients (black patients and those with first-degree relative with prostate cancer)	40	40–45	Not applicable
Discontinuation of screening	Life expectancy <10 yr	Life expectancy <10 yr	Not applicable
Screening tests	PSA, digital rectal examination	PSA, optional digital rectal examination	Not applicable
Frequency of screening	Annual (possibly less often for men in their 40s)†	Annual (every other year when PSA <2.5 ng/ml)	Not applicable
Criteria for biopsy referral	Age, family history, race or ethnic group, findings on digital rectal examination, total PSA, free PSA, PSA velocity, PSA density, previous biopsy findings, coexisting conditions	PSA ≥4.0 ng/ml, abnormal digital rectal examination; individualized risk assessment if PSA is 2.5–4.0 ng/ml	Not applicable

Summary

- Decision to undergo screening should be made after thorough discussion between patient and primary provider
- Average risk – begin screening between 40-50
- High risk – begin screening at age 40
- Annual screening initially
- Discontinue when life expectancy less than 10years

Questions?