The Role of PCP in Prostate Cancer Screening
Beaver Creek 2017

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A Critical Look at the Historical Flow

- Patient concern
- Office visit
- History
- DRE
- PSA
- Biopsy

Specimen with pathologist
Too Many Unnecessary Procedures

Patient concern

Office visit

History

DRE

PSA

Biopsy

Specimen with pathologist

This has been too subjective
The PSA Dilemma

What does the value mean? Why does an abnormal level not always result in intervention?

- Velocity?
- Density?
- Age Changes?
- Why am I creating unnecessary patients?
- 4.0?
PSA is an an Imperfect Test

- Serum PSA has a high false positive rate
- Over 1 million prostate biopsies performed annually in the US
  - 75% biopsies have low-grade indolent (Gleason 6) or no prostate cancer
  - Serious complications of biopsies include infection and hospitalization
Prostate Cancer Screening: How We Got to the Dilemma

• “Mass” population screening has small effect on CaP mortality
  • PLCO: no benefit
  • ERSPC: 20-30% RRR in subgroup (driven by 2 sites of 7)
• Significant risk of “overdiagnosis”
• Overdiagnosis drives “overtreatment”
• Overtreatment results in economic loss and side effects
Recommendations to **NOT** Screen

- Unnecessary Procedures
- Patient Complications
- Poor Consensus on PSA Values
The End of PSA
Early prostate cancer cases drop as PSA screening declines

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by Marie McCullough, Staff Writer

When an influential federal panel recommended in 2012 that doctors omit prostate cancer screening from routine health care, it set off a firestorm.

Many men and their doctors seem to have heeded the advice, though the long-term implications won't be clear for a while, a new analysis suggests.

The advice of the U.S. Preventive Services Task Force appears to have led to a sizable drop in screening with the PSA blood test, and in diagnosis of early-stage prostate cancer, according to American Cancer Society researchers who have been monitoring the trends.


Weiner AB¹, Matulewicz RS¹, Eggner SE², Schaeffer EM¹.

Abstract

BACKGROUND: Changes in prostate cancer screening practices in the United States have led to recent declines in overall incidence, but it is unknown whether relaxed screening has led to changes in the incidence of advanced and metastatic prostate cancer at diagnosis.
Male Patient
45 Years or Older
With at Least a 10 Year Expectancy

Screening PSA

Repeat PSA in 5 years

PSA <1.5

Consider Biopsy

PSA ≥1.5

Further Investigation by PCP or Urologist

Low Risk

High Risk

4K, PHI,PCA3 SelectMDx

Rosenberg MT, Spring AD, Crawford ED. IJCP 2015
Using PSA as a predictor

A single PSA measurement of > 1.6 ng/ml in men 45 to 49 years was associated with a 5.14% greater risk of dying of prostate cancer within 25 years of testing.

Distribution of 217000 PSA Levels

27%
Male Patient
45 Years or Older
With at Least a 10
Year Expectancy

Screening PSA

Repeat PSA in 5 years

PSA <1.5

High Risk

Low Risk

Further Investigation by PCP or Urologist

4K, PHI, PCA3, SelectMDx

Consider Biopsy

We have accidently created a mess

Rosenberg MT, Spring AD, Crawford ED. IJCP 2015
Multiple Biomarkers – No Consensus

 phi

 SelectMDx

 4K Score

 PCA3

 What is high risk?
 Who to biopsy?
 Head to head studies?
 Cost effective?
Primary Care is
- Confused
- Creating patient stress
- Wasting time and money

COST
Lack of Consistency With Biopsies
Poor Consensus on Biomarkers
The Future of Biomarkers?

- phi
- 4K
- PSA
- PCA3
- SelectMDx
The Requirements of New Guidelines

• Screen the right patient
• Identify aggressive disease
• Standardize the process
• Develop consensus between the PCP and the Urologist
• Understanding that screening for all diseases is the within the specialty of primary care
The Right Patient

Is the patient healthy enough that I would treat an aggressive prostate cancer if they had it?

NO - do nothing

YES - DRE/PSA
Initial Screening

Abnormal DRE

Refer to Urologist

PSA ≥ 1.5 ng/mL

Biomarker
This is Not My First Rodeo

- If I see an high blood sugar I get an glycoslyated A1C
- If I see an abnormal TSH I get a thyroid series
- If I see abnormal liver function tests I get an ultrasound
This is Not My First Rodeo

- If I see an high blood sugar I get an glycoslyated A1C

- If I see an abnormal TSH I get a thyroid series

- If I see abnormal liver function tests I get an ultrasound

- Following a high PSA with a biomarker is no brainer
Initial Screening

Abnormal DRE

- Refer to Urologist

PSA ≥ 1.5 ng/mL

- Biomarker

**Question 1:**
Is there a level of the PSA that should immediately prompt a Urology consult?
If so, what is that level?
The Problem Now is that Biomarker Interpretation is Not Consistent!
The PCP Needs Biomarker Interpretation to Be Consistent!!!

Question 2:
What level of a biomarker prompts a referral?

Question 3:
Why would you NOT get a biopsy with a...
  4K of greater than 7.5%?
  Phi score of greater than 35?
  SelectMDx of greater than 10%?
  PCA3 of greater than 10%?
Why Develop a Consensus Amongst Urologists and PCPs

• Primary care order 90% of screening tests
• PCPs have drastically reduced screening for lack of guideline support
• PCPs want to do the right thing
• Clarity will make this easier
• The urologist must understand that the PCPs seek guidance from them
Male Patient 45 Years or Older With at Least a 10 Year Expectancy

Screening PSA

- PSA < 1.5
  - Repeat PSA in 5 years

- PSA ≥ 1.5
  - High Risk
  - Consider Biopsy
  - Low Risk
  - PCP to evaluate further

4K, PHI, PCA3, SelectMDx

Rosenberg MT, Spring AD, Crawford ED. IJCP 2015, modified
Male Patient 45 Years or Older With at Least a 10 Year Expectancy

Screening PSA

Repeat PSA in 5 years

PSA < 1.5

PSA ≥ 1.5

PCP to evaluate further

High Risk

4K, PHI, PCA3 SelectMDx

Low Risk

Refer Urologist for biopsy

Rosenberg MT, Spring AD, Crawford ED. IJCP 2015, modified
The Future We Must Embrace

• PCP screen only the patients who would benefit from intervention if they have disease
• It is appropriate for the PCP to order the PSA and the biomarker
• The PCP should only refer the patients who are strong candidates for biopsy
• The only patients not getting a biopsy include
  – Change of heart after risk/benefit analysis by the Urologist
  – They want an MRI
  – Other?