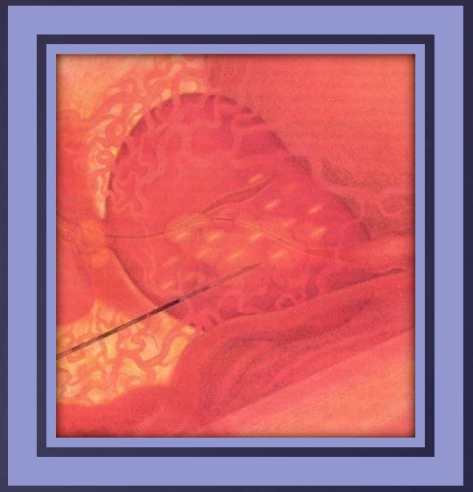
Family Medicine Grand Rounds:

Prostate Cancer Update for 2018



Wednesday, December 6, 2017.

Dr. John Jordan

Dr. Stephen Pautler

Western Medicine&Dentistry

Schulich School of Medicine & Dentistry

Faculty/Presenter Disclosure

- **Presenters: Dr. John Jordan**
  Dr. Stephen Pautler

- **Relationships with commercial interests:**
  - **Grants/Research Support: N/A**
  - **Speakers Bureau/Honoraria: N/A**
  - **Consulting Fees: N/A**
  - **Other: N/A**

Disclosure of Commercial Support

- **This program has received no commercial financial support.**
- **This program has received no in-kind support.**

Mitigating Potential Bias

- **Not applicable.**

Learning Objectives:

To understand ….

- the evolution of Prostate Cancer Screening Guidelines (how to proceed when there is apparent incongruity).
- how to translate Weak Recommendations and Strong Recommendations for your patients
- what happens to your patient when referred to pDAP (prostate diagnostic assessment program)
- the referral process for pDAP > what we have learned during the first year of operation

Prostate Cancer

- Lifetime risk of being diagnosed with prostate cancer is 14.3% but risk of dying of prostate cancer is only 3.6%

- Presentation
  - Early stages usually asymptomatic
    - Most cases detected by serum PSA or abnormal DRE

Prostate Cancer Screening
PSA Challenges …..

No clear cut-point between normal and abnormal PSA . Even PSA cut-off of 2.0ng/ml miss some prostate cancers.
(The Cancer Prevention Trial - 2003)

Positive predictive value for PSA > 4ng/ml = 30% (about 1 in 3 men with elevated PSA have prostate cancer detected at time of biopsy)

PPV increases to 45-60% for PSA > 10ng/ml

Nearly 75% of cancers detected in the grey zone (PSA 4-10) are organ confined; potentially curable.

<50% of prostate cancers organ confined if PSA >10

Prostate Cancer Screening
the evidence …..

- **PLCO (Prostate, Lung, Colorectal, Ovarian) Cancer Screening Trial** N Engl J Med 2009;360(13):1310-19
  - US trial 76,693 men randomly assigned to annual screen with PSA & DRE or to "usual care"; median follow-up of 11yrs
  - No difference in prostate-specific mortality between the 2 groups
- **Screening and Prostate Cancer Mortality in a European RCT (ERSPC)** N Engl J Med 2009;360(13):1320-28
  - 162,243 men from 7 countries randomized to screening with PSA (q 4yrs) or no screening; median follow-up of 9yrs
  - 20% reduction in prostate cancer mortality in the screening arm **(p=0.04)**
- **Goteborg Prostate-Cancer Screening Trial** Lancet Oncol 2010;11:725-732
  - 20,000 men age 50-69; PSA screen(q 2yrs) or no screen, (1995>2008)
  - 44% reduction in prostate cancer specific mortality **(p=0.002)**

Grades of evidence

- Grade A: effectiveness established to a degree that merits application
- Grade B: effectiveness established to a degree that suggests application
- Grade C: effectiveness established to a degree that warrants consideration of applying the findings
- Grade D: effectiveness established to a limited degree
- Grade E: effectiveness not established

Strength of Recommendation:

Strong	**Weak**
The recommendation would **apply to most individuals**.	**Different choices may be appropriate for individual patients**. Clinicians should support each patient in reaching a management decision consistent with their values and preferences Decision aids may support individuals in reaching such decisions.

Prostate Cancer Screening:
An Evolving Concept

- Canadian Task Force on Preventive Health: Prostate Cancer Screening Recommendations 2014. CMAJ 186(16),1-10, 2014.

- U.S. Preventive Services Task Force: Prostate Cancer Screening Recommendation; March 2012. ➡ USPSTF 2017 Draft Statement. JAMA 2017; 317(19):1949-1950.

  *Men 55-69yrs: Change No screen (Grade D) ➡ To screen (Grade C) 2017.

- American Urological Association: Prostate Screening Guideline May 2013 > *Reviewed and Validity Confirmed 2015.

- Canadian Urological Association recommendations on prostate cancer screening and early diagnosis. Can Urol Assoc J 2017;11(10):298-309.

  *Men who choose screening > start at age 50, screening interval based on level of PSA

Screening for Prostate Cancer: CTF Recommendations

- For men **aged less than 55 years**, we recommend **not screening** for prostate cancer with the prostate-specific antigen test. *(Strong; low quality evidence)*
- For men **aged 55–69 years**, we recommend **not screening** for prostate cancer with the prostate-specific antigen test. *(Weak; moderate quality evidence)*
- For men **70 years of age and older**, we recommend **not screening** for prostate cancer with the prostate-specific antigen test. *(Strong; low quality evidence)*

Canadian Task Force, 2014

Prostate Cancer Screening
Recommendations 2014

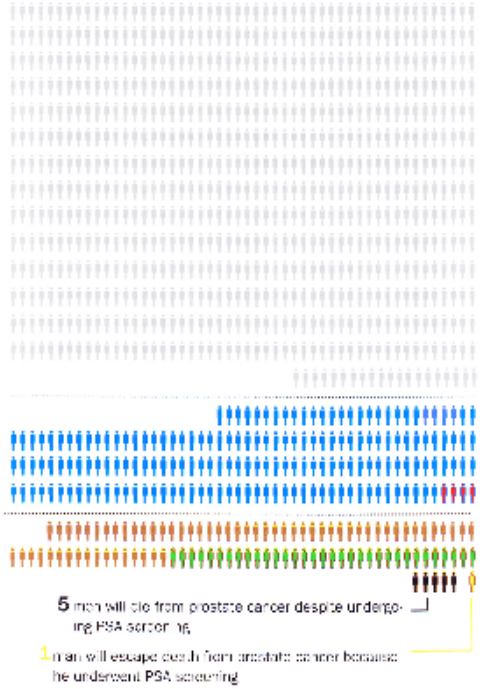
Canadian Task Force
on Preventive Health

Benefits and Harms of PSA Screening

The Canadian Task Force on Preventive Health Care recommends against screening for prostate cancer with the PSA test

- The CTFPHC found that the potential small benefit from PSA screening is outweighed by the potential significant harms of the screening and associated follow up treatment.
- Men should understand that PSA screening may result in additional testing if the PSA level is raised.
- To save one life we would need to diagnose an additional 27 men with prostate cancer

RESULTS OF SCREENING 1,000 MEN WITH THE PSA TEST
(age 55–69 years, screened over a 13-year period, and with a PSA screening threshold of 3.0 ng/ml)



720 men will have a negative PSA test

178 men with a positive PSA in whom follow up testing does not identify prostate cancer

4 of these 178 will experience biopsy complications such as infection and bleeding severe enough to require hospitalization

102 men will be diagnosed with prostate cancer

33 of these 102 prostate cancers would not have caused illness or death
because of uncertainty about whether their cancer will progress, most men will choose treatment and may experience complications of treatment

5 men will die from prostate cancer despite undergoing PSA screening

1 man will escape death from prostate cancer because he underwent PSA screening

What are my risks if I don't get screened?

- Among men who are screened with the PSA test, the risk of dying from prostate cancer is 3 in 1,000
- Among men who are not screened with the PSA test, the risk of dying from prostate cancer is 6 in 1,000

Complications of treatment for prostate cancer

For every 1,000 men who receive treatment for prostate cancer:

- 114–214 will have short-term complications such as infections, additional surgeries, and blood transfusions
- 127–442 will experience long-term erectile dysfunction
- Up to 178 will experience urinary incontinence
- 4–8 will die from complications of prostate cancer treatment

Statistics for benefits and harms were followed from the European Randomized Study of Screening for Prostate Cancer

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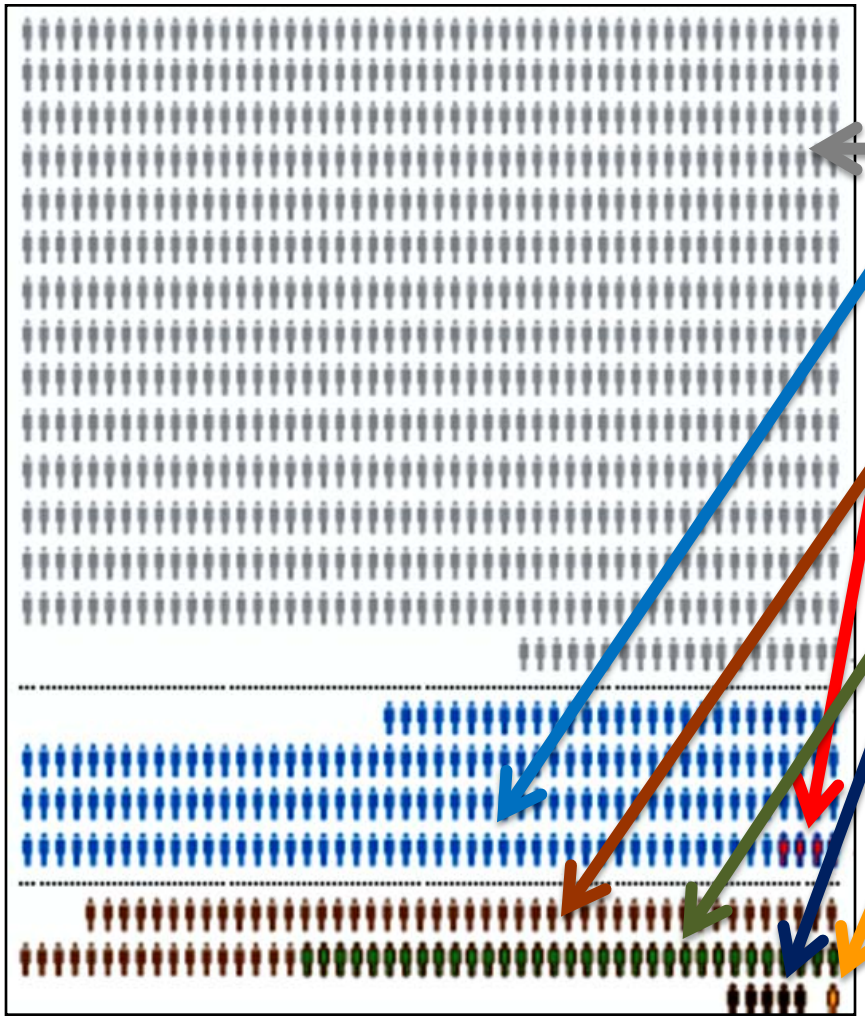
Benefits and Harms of PSA Screening:

(men age 55-69 yrs, screened for 13 yrs, PSA threshold of 3.0 ng/ml)



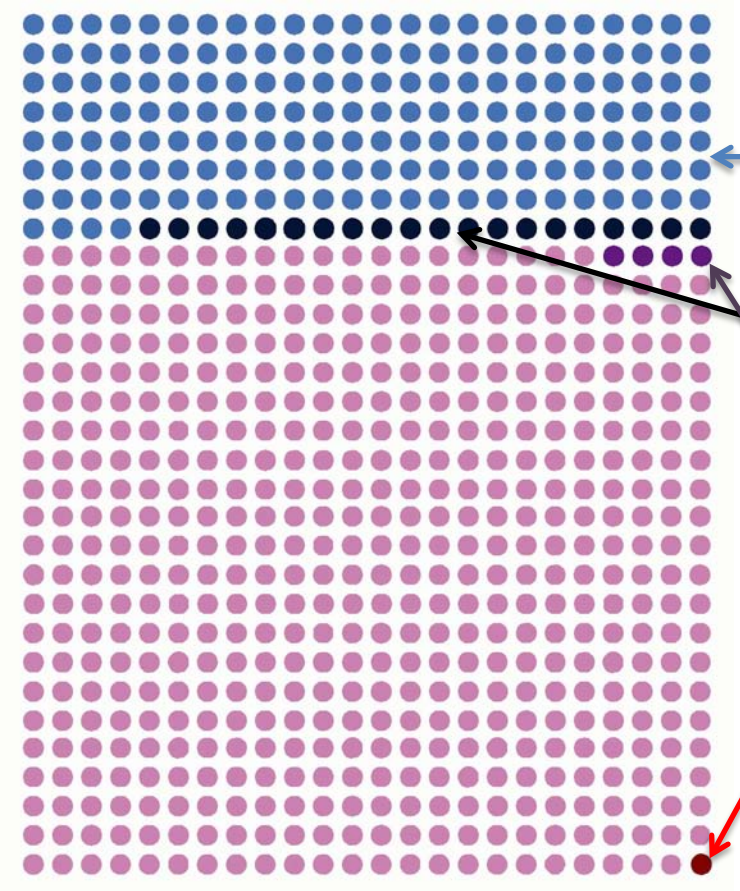
Of 1000 men screened with PSA:

- 720 men test negative
- 178 have false positive results
- 4 have biopsy complications
- 102 diagnoses of prostate cancer
  - 33 do not cause illness or death
- 5 die of prostate cancer despite PSA screening
- 1 escapes death because of PSA screening (actually 1.28 >782 to save 1)

Canadian Task Force on Preventive Care (2014) Recommendations for PSA screening

Benefits and Harms of Screening Mammography: Women Aged 50-69

(average risk; screened every 2yrs for 11yrs)



720 women screened:

- 204 have false +ve result requiring further imaging
- 26 have biopsy
- 4 have part or all of a breast unnecessarily removed
- 1 escapes death from breast cancer

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Prostate Cancer Screening
Current Recommendations:

- Discuss issues regarding prostate cancer screening with men age > 50yrs. Patients need to be informed about risks and benefits of screening in order to make informed decision

- **If** patient decides to be screened ……
  - Offer PSA and DRE for men age 50/55-69yrs every 2yrs
    - No routine screening for men age 40-50/54yrs
    - No screening for men age > 70yrs
    - No screening if life expectancy < 10yrs

- Men at increased risk, recommend start screening ~ age 45

London Prostate Cancer Diagnostic Assessment Program

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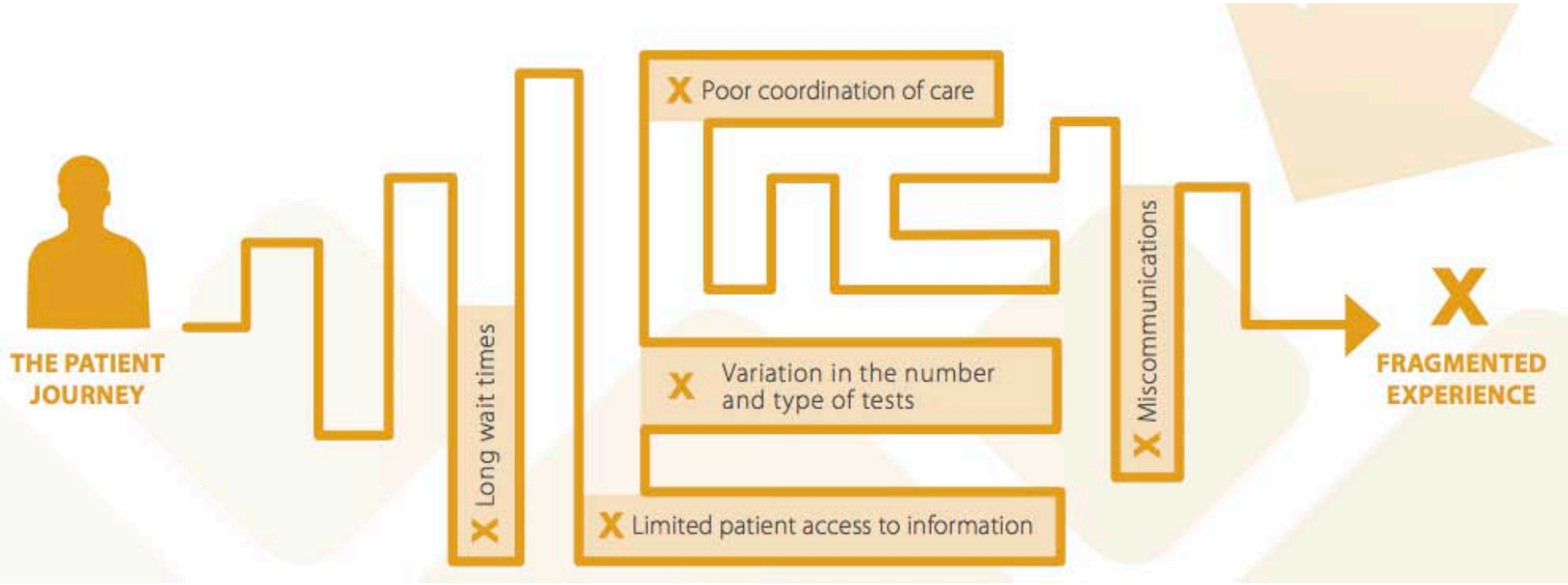
SWRCP Surgical Oncology Lead
Medical Director, pDAP SJHC

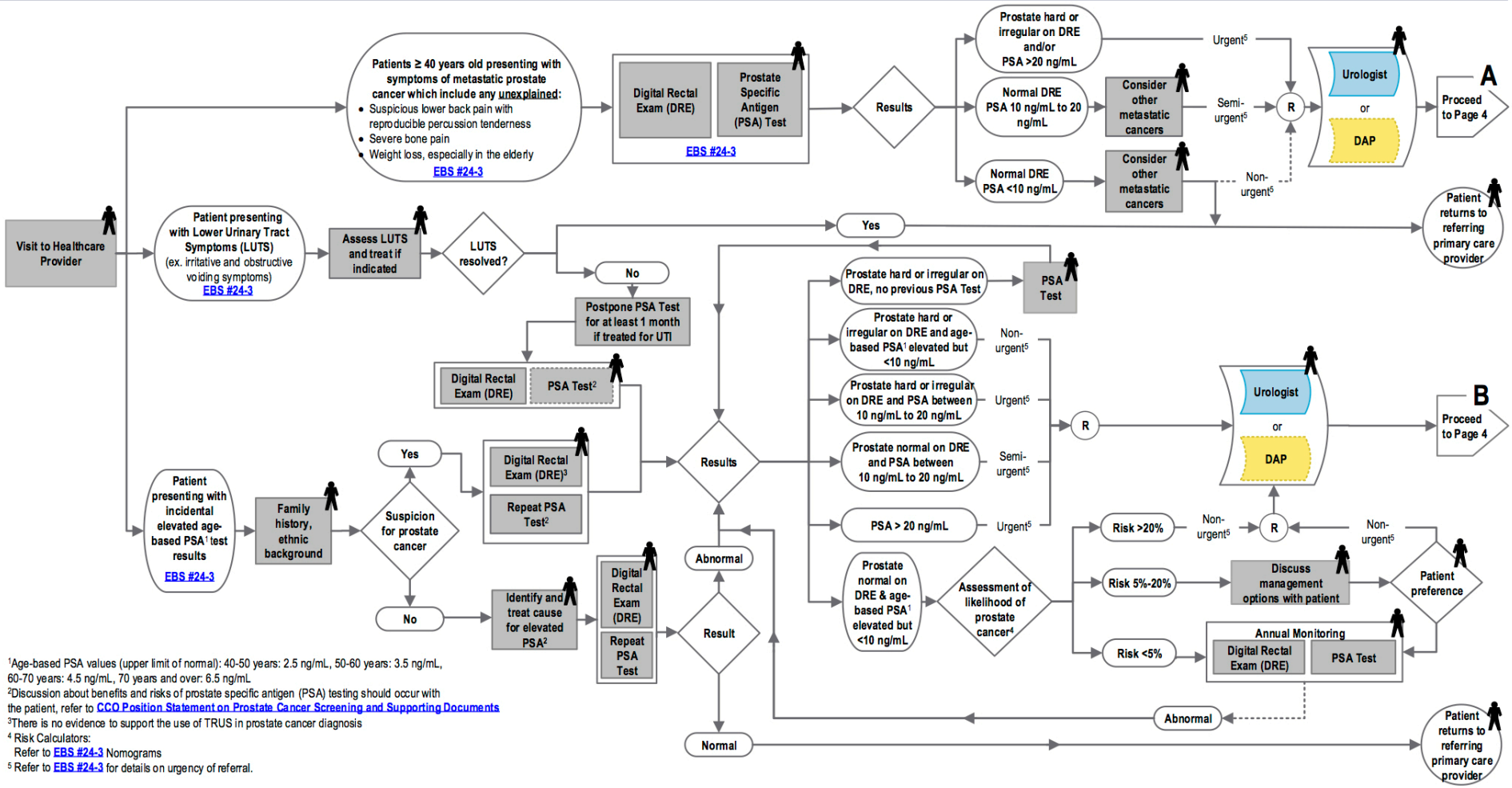
Family Medicine Grand Rounds
December 6, 2017

South West
Regional Cancer Program
in partnership with Cancer Care Ontario

CCO Diagnostic Assessment Programs

What is the problem?





[1]Age-based PSA values (upper limit of normal): 40-50 years: 2.5 ng/mL, 50-60 years: 3.5 ng/mL, 60-70 years: 4.5 ng/mL, 70 years and over: 6.5 ng/mL

[2]Discussion about benefits and risks of prostate specific antigen (PSA) testing should occur with the patient, refer to CCO Position Statement on Prostate Cancer Screening and Supporting Documents

[3]There is no evidence to support the use of TRUS in prostate cancer diagnosis

[4] Risk Calculators:
Refer to EBS #24-3 Nomograms

[5] Refer to EBS #24-3 for details on urgency of referral.

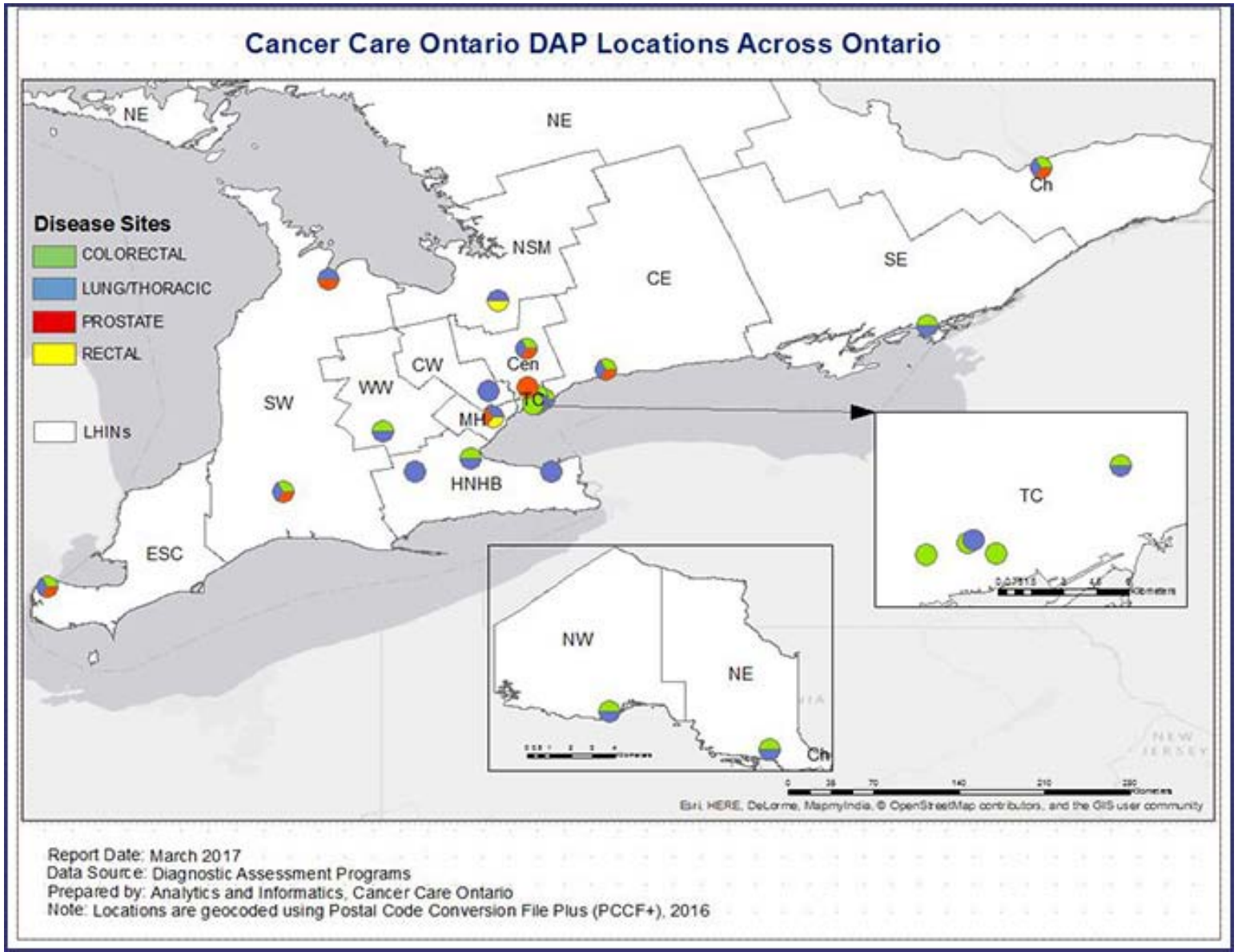
CCO Strategic Priorities

- Align and define the scope of DAPs
- **Goal is to improve the diagnostic phase for all individuals undergoing a potential cancer diagnosis**
- diagnosis then treatment
- Drive continuous quality improvement in diagnostic phase

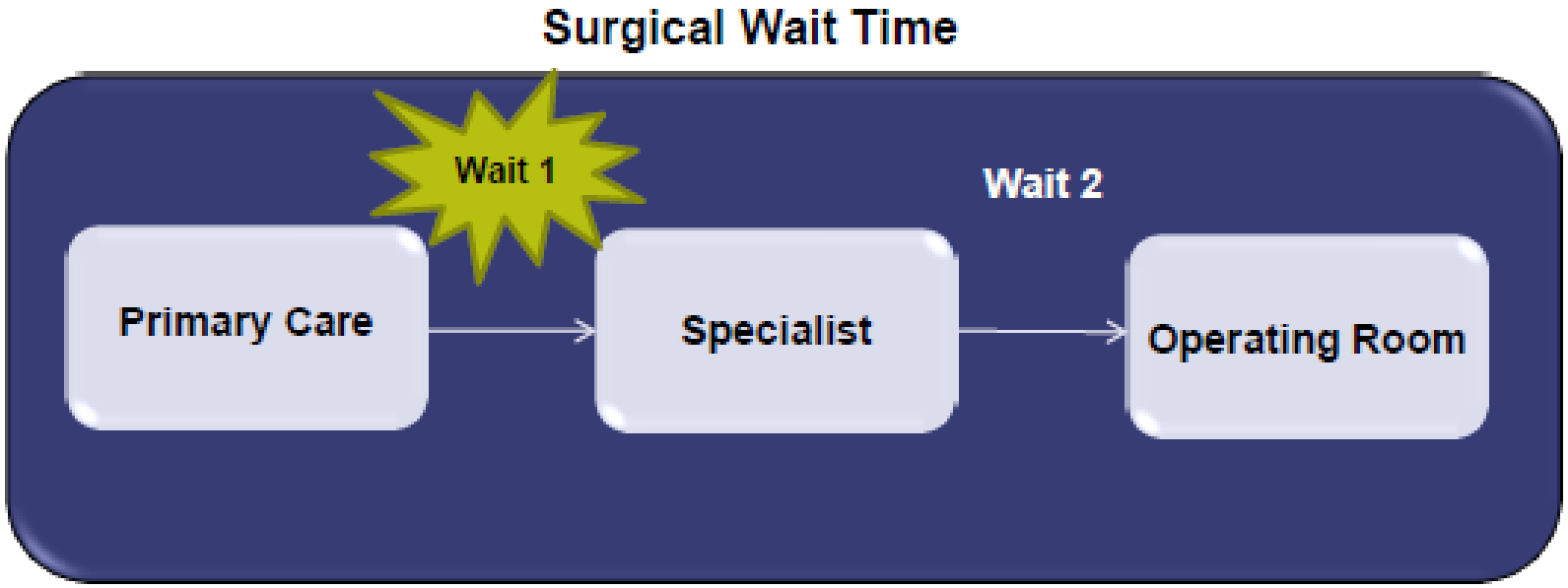
DAPs

- Developed by Cancer Care Ontario (CCO) to improve the diagnostic phase of cancer care
- Serve as a single point of access to diagnostic services allowing coordination of testing
- Guided by best practice and evidence-based literature
- Provide information and support for patients and their families throughout their cancer journey
- Assist primary care physicians in seeking timely referral access to cancer care specialists

DAPs in Ontario



Surgical Wait 1



Surgical Wait 1
Time from Referral to First Surgical Consultation

Wait 2
Time from Decision to Treat to Procedure Date

Access To Care/CCO Wait 1

Access to Care

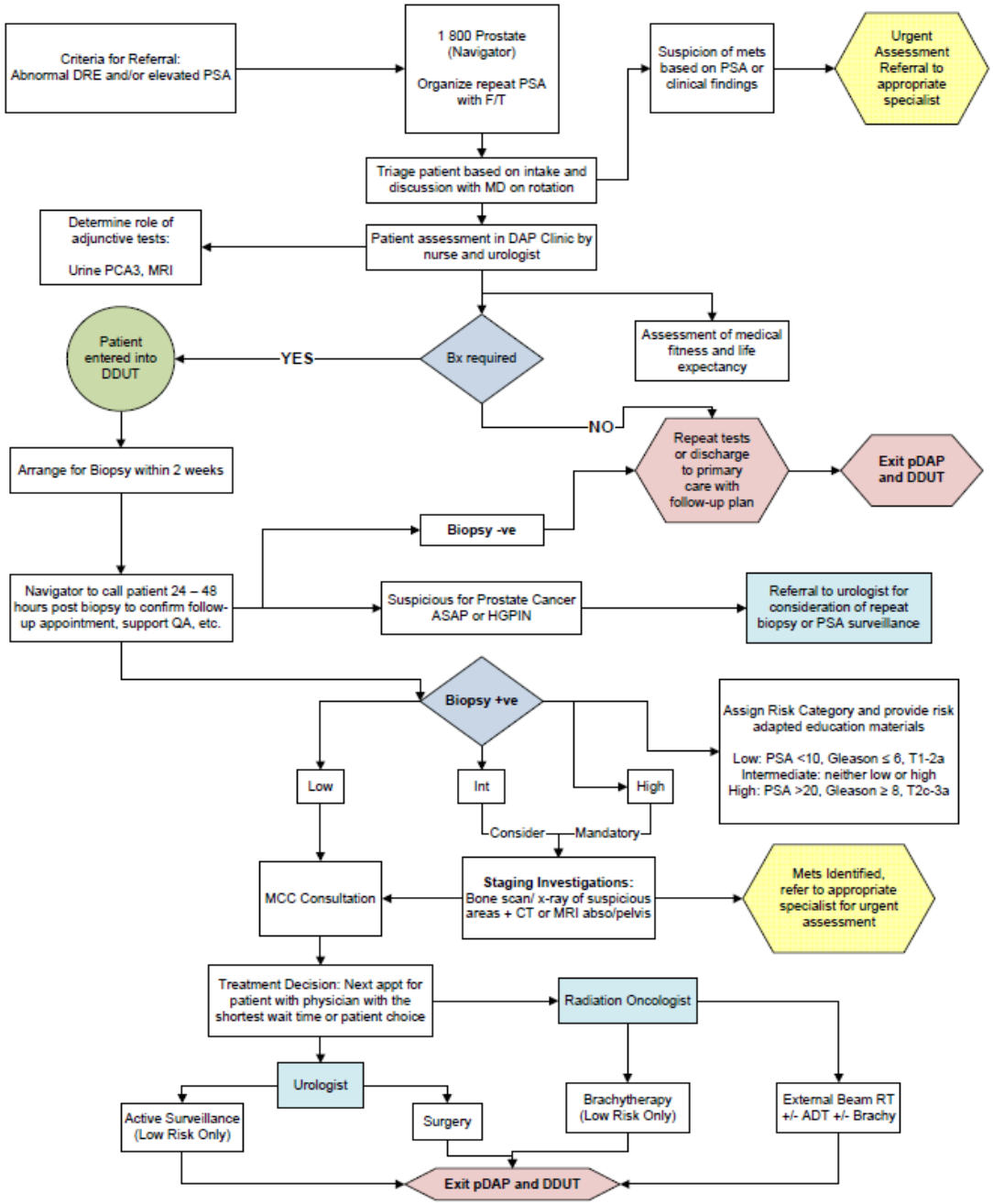
Oncology Procedures

Adult – Wait 1 Priority Assessment Tool

Priority	Descriptions	Wait 1 Access Target
1	▪ High suspicion of cancer or biopsy positive for cancer where patient has severe life or limb threatening symptoms and signs and where imminent morbidity or mortality without immediate intervention is high	Within 24 Hours
2	▪ High suspicion of cancer or biopsy positive for cancer where patient has high likelihood of having a highly aggressive malignancy	Within 10 Days
3	▪ All patients with high suspicion of cancer that does not meet the criteria of Priority 2 or Priority 4	Within 21 Days
4	▪ All patients with an intermediate level for suspicion of cancer or patients with biopsy positive cancer but with a high likelihood of an indolent malignancy	Within 35 Days

London pDAP

Prostate DAP
Single Site for Assessment and Diagnosis



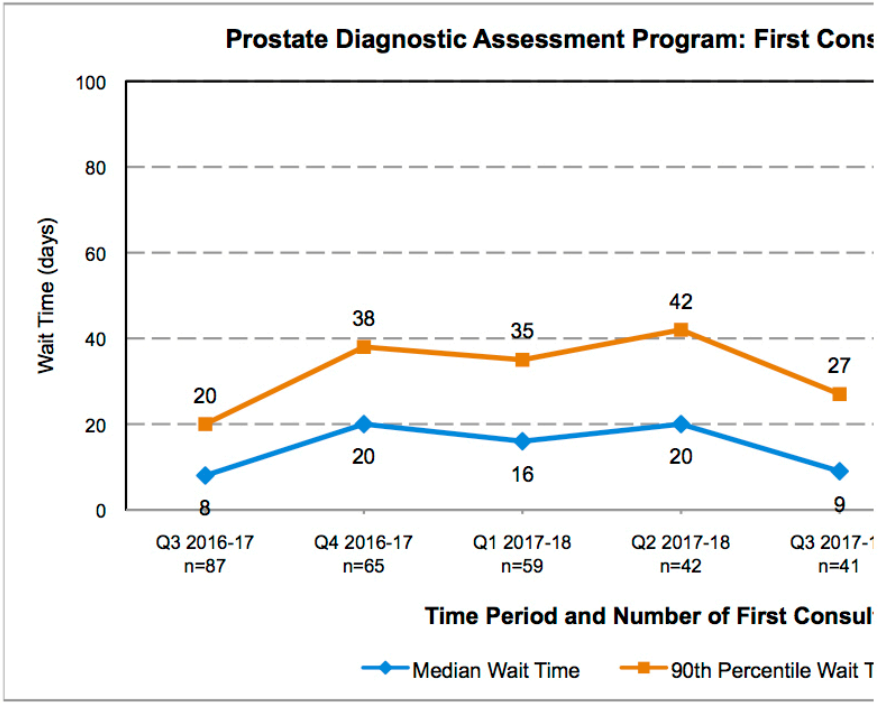
London pDAP Data

- 291 patients seen thus far
- 134 TRUS+bx
- 88 diagnosed with prostate cancer
- 18 referred for surgery
- 41 referred for radiation
- 4 with metastatic disease
- Active surveillance/WW 21

Wait Times

Access: Prostate Diagnostic Assessment Program

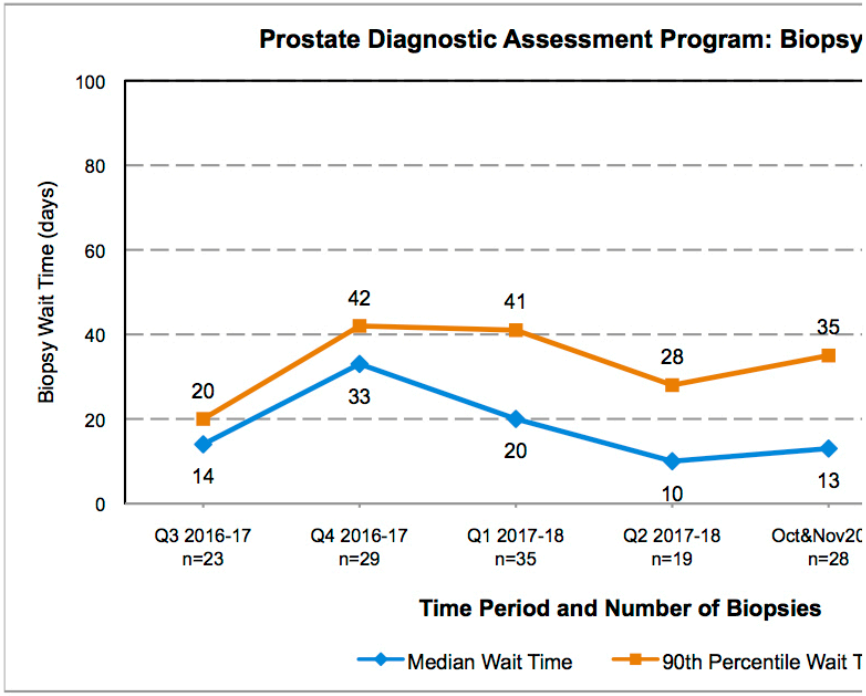
Wait Time for First Consult **as of November 30, 2017**



Wait Times

Access: Prostate Diagnostic Assessment Program

Biopsy Wait Time, Request Received to Procedure Complete Date, **as of No**



Declined Referrals

- 46 Declined referrals

• Out of Area:	11
• Patient Declined Investigation:	1
• Health Status changed/GP cancelled:	4
• Patient non-compliant	1
• PSA Within Normal Limits with normal DRE	15
• Patient was seen by urologist outside of program	9
• Patient was already diagnosed with cancer	4
• Other	1

Patient Experience

- All patients given opportunity to survey about experience
- Positive feedback for organization of appointments
- Navigation found to be a strong asset
- Wait times were rated as excellent

- No voiced concerns on shared care model

Q2 During the diagnostic process, the health care team (e.g. Patient Navigator, Doctor, Receptionist etc)		
2a Gave me instructions on how to get ready for my next appointment	Strongly Agree	***90%***
2b Told me why I needed the tests in a way that I could understand	Strongly Agree	***90%***
2c Answered my questions or connected me to someone who could	Strongly Agree	***10%***

Q3 During the diagnostic process:		
3a The doctor told me about my test results in a way that I could understand	Strongly Agree	***80%***

Q4 During the diagnostic process, I was comfortable talking about my worries and/or concerns with the health care team (e.g. Patient Navigator, Doctor, Receptionist etc.):	Strongly Agree	***100%***

Q10 If you had a good experience while being cared for by the Patient Navigator and/or the health care team during the diagnostic process, please tell us about it:

"Excellent team, felt very well cared for"

"Was helpful in getting appointment for diagnostic tests and follow up"

"The nurse was very helpful and spoke clearly and slowly which was good for me as English is my second language. The person who greeting us was very helpful and friendly".

"Everyone concerned with the process was extremely helpful and understanding, and did their best to make me feel comfortable during a worrying time for me".

"Helped relieve my nervousness about the process.

"Everything ran smooth and was on time. Everyone was friendly and helpful. Perfect"

"Friendly, there was an error regarding my first and last name, and the team was very apologetic about that"

"I was quite surprised the short time it took from being referred by my family doctor, seeing the Urologist and having the diagnostic completed. The Dr

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London pDAP Challenges

- One hurdle is “completeness of referral”
- Shared care model
  - Active surveillance patients
  - Metastatic patients logistics
  - No CaP diagnoses that require urologic care
- Re-referrals of patients seen previously
- Inpatient consults
- Clinical Trials research

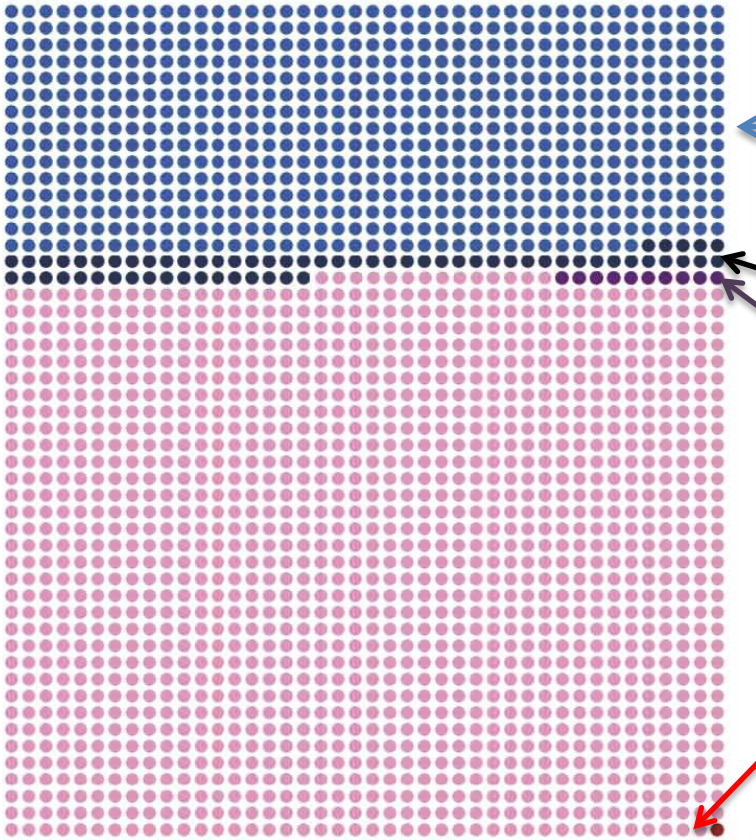
Questions?

Optimal DAP

- Standardized patient care throughout the referral and diagnosis phases
- Reduced wait times for initial referral and treatment
- No disease progression where possible
- Improved patients' experiences through this initial complex and important phase of their cancer journey

Over-Screening: Breast Cancer Women Aged 40-49

(average risk; screened every 2 yrs for 11 yrs)



2,100 women screened:

- 700 have false +ve result requiring further imaging
- 75 have biopsy
- 10 have part or all of a breast unnecessarily removed
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