

## PHE part 3: Podcast series Don't do's, Cases and Resources

### DON'T: Seven Deadly (PHE) Sins

- 1) Review of Systems (mike's rule)
- 2) Screen for depression (or virtual anything)
- 3) Urinalysis, CBC, LFT, creatinine, any biomarker, etc
- 4) Chest x-ray, ECG, virtual anything
- 5) Cholesterol or sugar in "young" (<40) healthy
- 6) Other time wasters: like Waist circumference.
  - Or even mention metabolic syndrome.
- 7) Don't recommend Vitamins, ASA, low salt, etc.

<http://canadiantaskforce.ca/?content=pcp>

## CBC: an example of limits

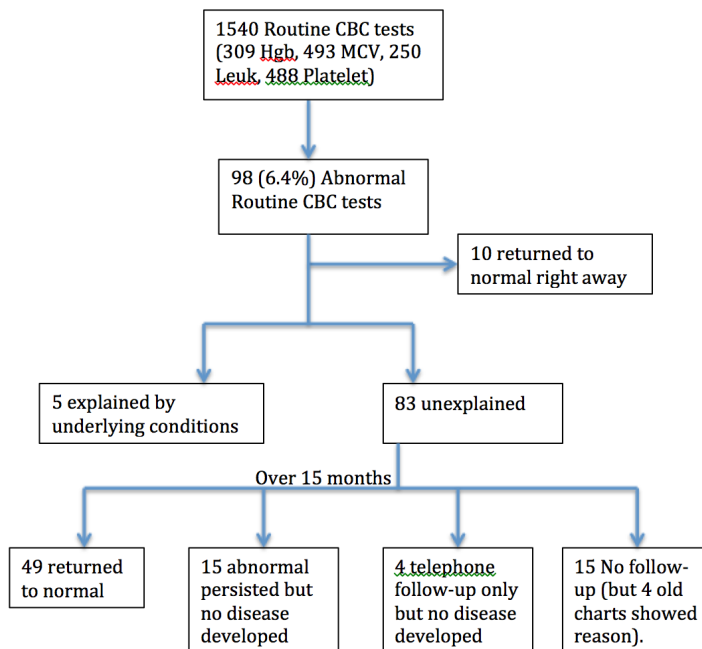
- Community screening (+ long-term care) 8 studies<sup>1</sup>
  - 6.4-13.5% abnormal (~ ¾ mildly abnormal)
    - 1 study institutional elderly (age 83) =30% abnormal
  - <2% management change (mostly iron def)
  - 0-0.09% something serious
- Pre-op & Admission screening x 9 studies<sup>2</sup>
  - Overall 0.8% to 3.0% abnormal
  - 0-1.9% changed management.
  - Small African study admission 38% abnormal, 1.9% change

1) BMJ 1967;4:714-717. JAMA 1983; 249:633-636. Lancet 1980; 1: 552. Ann Intern Med 1992; 116:44-50. Am J Med. 1996; 101: 142-152. Am J med Sci 1995;309(4): 194-200. Am J Public Health 1985; 75: 243-245. JAMA. 1983; 249:633-6. 2) four studies from Health Technology Assessment 2012; Vol. 16: No. 50. J Gen Intern Med 1987;2:373- 6. Postgrad Med J 1989: 65:525-7. N. S Afr Med J 1997;87:734-7. JAMA 1985; 253: 3576-81. JAMA 1984;252: 231-234.

## Examples of some CBC studies

Article	Setting	Population	Test	Results	Identified	Notes
Ruttimann, Ann Intern Med 1992; 116:44-50.	Internal Med (US – referral & primary care) Outpatient University	Prospective cohort 595, (62% male), mean age 39, (12.5% >60yrs)	CBC (Looking Hgb, Platelet, MCV, leukocyte)*	1540 routine tests** done with 98 (6.4%) were abnormal (note 5% anticipated)	17 pts (with 19 abnormalities) investigated. 3 resulted in management change (0.5% of patients)	3 abnormalities with management change= iron def. Most abnormalities overall were mildly abnormal. 2.4% got extended work-up.
Boland, Am J Med. 1996; 101: 142-152	4 Mayo clinics, ambulatory outpatient, Gen Internal Med (67% prim care)	Prospective cohort, 531 general med exams (mean age 63, 57% female)	CBC (Hgb Platelet, leuk). Other test too. Only consider case finding	92% (325) not needing a CBC got one (case finding). †	13.5% (up 18%)†† CBC ≥1 component abnormal. New Dx 1.5% & Tx 0.9% (2 anemia 1 platelet)	Most (~75%) mildly abnormal. 5.5% worked up. Of abnormalities, 10% repeat, 22% investigated, 67% nothing.
Boland, Am J med Sci 1995;309(4): 194-200.	2 Mayo intern med clinics (one primary care, one mixed)	100 selected patients for gen med exam (mean age 59, 58% female)	CBC (Hgb Platelet, leuk). Other test too. Only consider case finding	91% got CBC, 6 were abnormal, (1)	2% Dx and Tx (both had iron def anemia)	Of 52 total abnormal lab test, 42 no action, 3 repeated and 7 investigated.
Domoto, Am J Public Health 1985; 75: 243-245	Long term care in Boston. Focus on annual screening.	70 "least care" pts. (mean age 83, 76% female) (2)	Hematocrit & WBC. Other tests too.	On Annual: 30.1% (half new) Hemato & 8.1% (75% new) abnormal	Most mildly abnormal. No changes in care for CBC	In annual screening x 2 years (2964 tests) only 2 changes: one asymptomatic bacteriuria (Tx) and a Zenkers diverticulum found with FOB

Figure 1 (of Ruttimann, Ann Intern Med 1992; 116:44-50. )



## Cases

## Case 1: Mr Fret E Full

- A 28 year old male with a BMI of 26
- He rarely comes in.
- He starts with “My girlfriend wanted me to come in for a check-up”
- Questions: (Why does your girlfriend want you to come in?)
- Exercises regularly, non-smoker, & No family history of anything.

## Case 2: Fit S Mom

- 38 year old female with BMI of 25. Otherwise well
- What history do you want?
  - Family history: None Cancer or Heart Disease. & She has never had any screening.
  - Do you Smoke
- What would you do in an exam?
  - BP & Pap (if due)
  - Plus whatever to meet pt expectation
- What would you order?
  - “PAP” cytology

### Case 3: Mr T T Screen

- 55 year old male with a BMI of 31. Otherwise well.
- What history do you want?
  - Family history: None Cancer or Heart Disease. & He has never had any screening.
  - Do you Smoke
- What would you do in an exam?
  - BP
  - Plus whatever to meet pt expectation
- What would you order?
  - Lipid & sugar, FIT
  - ? PSA, ? CT for lung Ca

### Case 4: Mrs Edith Harm

- 72 year old female with a BMI of 31. BP but otherwise well. On Ramipril and Chlorthalidone.
- What history do you want?
  - Family history: ?
  - Do you Smoke?
- What would you do in an exam?
  - BP
  - Plus whatever to meet pt expectation
- What would you order?
  - FIT, Mammogram,... lipid & sugar. STOP PAP
  - If male smoker, ? Ultrasound for AAA,
  - If smoker, ? Lung Ca via CT scan
  - If male, ? PSA

## RESOURCES

- College of Family Physicians of Canada
- Toward Optimized Practice
- Task Force:
  - Screening for DM
  - Discussion tools
- Tools for Practice
- Risk calculators:

Can College Fam Phys	<b>Preventive Care Checklist Form<sup>®</sup></b> <b>For average-risk, routine, female health assessments</b> <small>Developed by: Dr. V. Dubey, Dr. R. Mathew, Dr. K. Iglar          Revised by: Dr. A. Duerksen</small> <small>Please note:          Bold = Good evidence from the Canadian Task Force on Preventive Health Care          Italic = Fair evidence from the Canadian Task Force on Preventive Health Care          Plain text = Guideline from other Canadian sources          (See reverse for references, insert for aspirations)</small>		Name: _____ Sex: _____ DOB: _____ Age: _____ Health Card: _____ Tel: _____ Address: _____ Date: _____
	<b>Current Concerns</b>	<b>Lifestyle/Habits</b> Diet: _____ <i>Smoking:</i> _____ <i>Fat/Cholesterol</i> _____ <i>Alcohol:</i> _____ Fiber _____ Calcium _____ Sodium _____ Exercise: _____ <i>Sexual History:</i> _____ Work/Education: _____ Family Planning/ Income Below Poverty Line: _____ Contraception: _____ <input type="checkbox"/> Yes <input type="checkbox"/> No Family: _____ Sleep: _____ Relationships: _____	
	<b>Functional Inquiry</b> <small>Normal Remarks</small> HEENT: <input type="checkbox"/> CVS: <input type="checkbox"/> Resp: <input type="checkbox"/> Breasts: <input type="checkbox"/> GI: <input type="checkbox"/>	<b>Update Cumulative Patient Profile</b> <input type="checkbox"/> Family History <input type="checkbox"/> Medications <input type="checkbox"/> Hospitalizations/Surgeries <input type="checkbox"/> Allergies	
	<small>Normal Remarks</small> Sexual Function: <input type="checkbox"/> MSK: <input type="checkbox"/> Neuro: <input type="checkbox"/> Derm: <input type="checkbox"/> Mental Health: <input type="checkbox"/> Depression screen <input type="checkbox"/> positive <input type="checkbox"/> negative		

<http://www.cfpc.ca/ProjectAssets/Templates/Resource.aspx?id=1184&langType=4105>

**Please note:****Bold** = Good evidence (from the Canadian Task Force on Preventive Health Care)*Italics* = Fair evidence (from the Canadian Task Force on Preventive Health Care)

Plain text = Guidelines (from other Canadian sources)

**≥ 65 years**

- ☐ **Mammography** (50-69 yrs, q1-2)
- ☐ **Hemoccult Multiphase q1-2 years** (age 65-74)  
OR ☐ *Sigmoidoscopy* OR ☐ Colonoscopy
- ☐ *Audioscope (or inquire/whispered voice test)*
- ☐ Fasting Lipid Profile
- ☐ *Fasting Blood Glucose, at least q3 yrs (more often if at risk)*
- ☐ *Bone Mineral Density* (reassess risk in 1-3 yr if moderate risk, in 5 yr if low risk)

<http://www.cfpc.ca/ProjectAssets/Templates/Resource.aspx?id=1184&langType=4105>

## Task Force & Diabetes

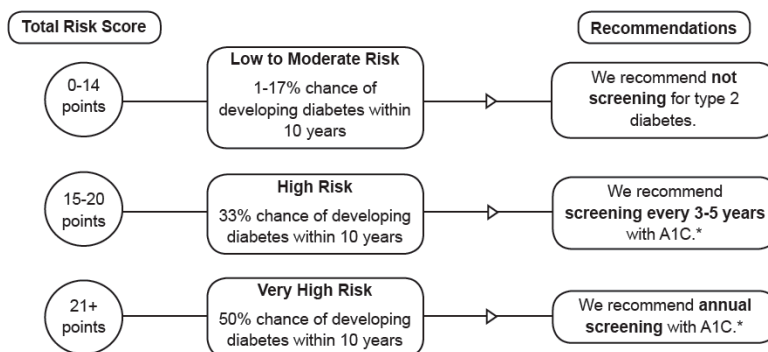
### TYPE 2 DIABETES RISK CALCULATOR FOR CLINICIANS<sup>1</sup>

<p><b>1. How old is your patient?</b></p> <p><input type="checkbox"/> 18-44 years (0 POINTS)</p> <p><input type="checkbox"/> 45-54 years (2 POINTS)</p> <p><input type="checkbox"/> 55-64 years (3 POINTS)</p> <p><input type="checkbox"/> 65 years and older (4 POINTS)</p>	<p><b>5. How often does your patient eat vegetables and fruits?</b></p> <p><input type="checkbox"/> Every day (0 POINTS)</p> <p><input type="checkbox"/> Not every day (1 POINT)</p>
<p><b>2. What is your patient's body-mass index (BMI)/BMI category?</b> - (See Appendix 1 for a BMI chart or visit <a href="http://www.bmi-calculator.net">www.bmi-calculator.net</a> for a BMI calculator.)</p> <p><input type="checkbox"/> Normal (Lower than 25.0 kg/m<sup>2</sup>) (0 POINTS)</p> <p><input type="checkbox"/> Overweight (25.0-29.9 kg/m<sup>2</sup>) (1 POINT)</p> <p><input type="checkbox"/> Obese (30.0 kg/m<sup>2</sup> or higher) (3 POINTS)</p>	<p><b>6. Has your patient ever taken medication for high blood pressure on a regular basis?</b></p> <p><input type="checkbox"/> No (0 POINTS)</p> <p><input type="checkbox"/> Yes (2 POINTS)</p>
<p><b>3. What is your patient's waist circumference? Waist circumference is measured below the ribs (usually at the level of the navel).</b></p> <p><b>MEN</b></p> <p><input type="checkbox"/> Less than 94 cm (less than ~37 inches) (0 POINTS)</p> <p><input type="checkbox"/> 94-102 cm (~37-40 inches) (3 POINTS)</p> <p><input type="checkbox"/> More than 102 cm (more than ~40 inches) (4 POINTS)</p> <p><b>WOMEN</b></p> <p><input type="checkbox"/> Less than 80 cm (less than ~31 inches) (0 POINTS)</p> <p><input type="checkbox"/> 80-88 cm (~31-35 inches) (3 POINTS)</p> <p><input type="checkbox"/> More than 88 cm (more than ~35 inches) (4 POINTS)</p>	<p><b>7. Has your patient ever been found to have high blood glucose (e.g. in a health examination, during an illness, during pregnancy)?</b></p> <p><input type="checkbox"/> No (0 POINTS)</p> <p><input type="checkbox"/> Yes (5 POINTS)</p>
<p><b>4. Is your patient physically active for more than 30 minutes every day? This includes physical activity during work, leisure, or regular daily routine.</b></p> <p><input type="checkbox"/> Yes (0 POINTS)</p> <p><input type="checkbox"/> No (2 POINTS)</p>	<p><b>8. Have any members of your patient's immediate family or other relatives been diagnosed with diabetes (type 1 or type 2)? This question applies to blood relatives only.</b></p> <p><input type="checkbox"/> No (0 POINTS)</p> <p><input type="checkbox"/> Yes: grandparent, aunt, uncle, or first cousin (but not own parent, brother, sister, or child) (3 POINTS)</p> <p><input type="checkbox"/> Yes: parent, brother, sister, or own child (5 POINTS)</p>

<sup>1</sup>Source: Finnish Diabetes Risk Score (FINDRISC) questionnaire by Adjunct Professor Jaana Lindström, Diabetes Prevention Unit, Department of Chronic Disease Prevention, National Institute for Health and Welfare, Helsinki, Finland and Professor Jaakko Tuomilehto, Center for Vascular Prevention, Danube-University Krems, Krems, Austria

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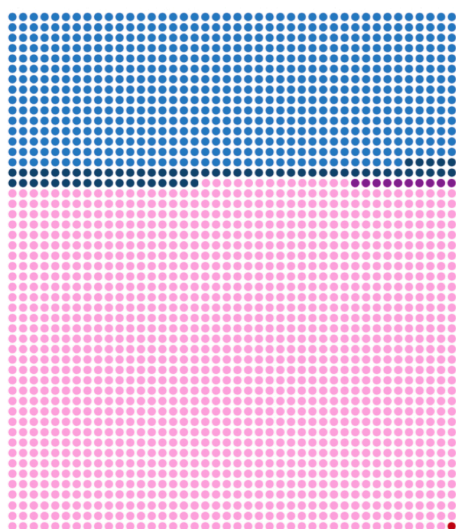
## Screening for Diabetes



- Or CDA states: Screen every 3 years in individuals 40 years of age or in individuals at high risk using a risk calculator.

## Patient Discussion Tools

If we screened **2100** women, aged 40-49 years, at average risk of breast cancer every two years for 11 years...



...about **700** women would experience a false positive mamogram requiring further imaging...

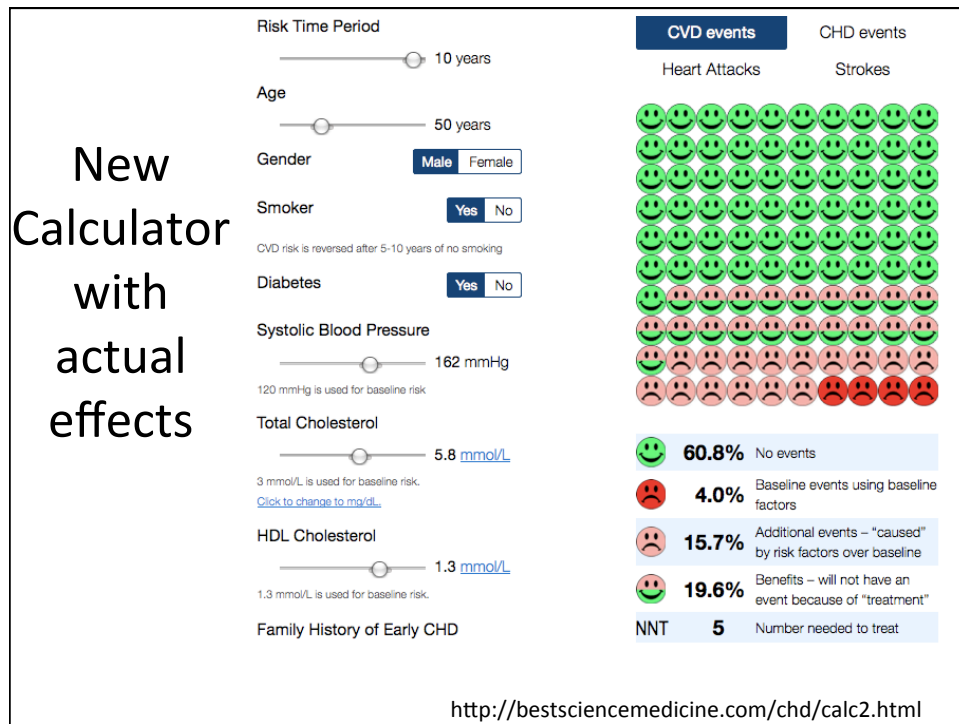
...**75** of these women would have a biopsy, all to confirm that they do not have breast cancer

...at least **10** women would be unnecessarily treated for breast cancer (removal of part or all of a breast when no cancer is present) and bear the burden of over- diagnosis

...**1** woman would escape a breast cancer death







## Bonus Slides

- Cancer Screening Summary slides
- Benefits of Lifestyle info

## Smoking Cessation

- Weekly counseling x 3 months +/- Bupropion/NRT
- Comparing intensive intervention vs usual
  - 2 yr continued abstinence 39% vs 9% (NNT 4)
    - Normal cessation rates in highest risk pts. is 9%
    - Even a low cessation rate (30%) is better than nothing!
  - Hospitalization 23% vs 41% (NNT 6)
  - Mortality 3% vs 12% (NNT 11)
- Other Studies find mortality reductions as well.

Chest 2007; 131: 446–52 Ann Intern Med. 2005;142:233-9.

## Activity

- RCT 101 males (~61), stable angina
  - PCI single vessel vs Bike to 70% HR of Sx for 10 min/d x 2 wks, then 20 min/d + one 60 min/wk
- Exercise ↓ ischemic outcomes
  - RRR 61%, AR 18%, NNT 6, (At 50% cost).
- Similar to others:
  - Cochrane exercise review found 31% CAD mortality reduction & other papers find the same
  - In CHF over 10 years, Mortality down from 16% to 6%

Circulation 2004;109:1371-8. Cochrane 2011;(7):CD001800. J Am Coll Cardiol 2012;60:1521–8.

## Lifestyle

	Countries	Risk	CVD	Mortality
Lancet 1994	France	Secondary (MI within 6 months)	0.27 (0.12-0.59)	0.30 (0.11-0.82)
Lancet 2002	Northern India	Mixed ( $\geq 1$ risks (BP, Chol, DM), or angina or MI)*	0.50 (0.34-0.73)	0.63 (not sign, p=0.064)
N Engl J Med 2013	Spain	Primary (had DM or 3 risks: smoking, BP, LDL, HDL, wgt, family Hx)	0.70 (0.55–0.89)	0.89 (0.71–1.12)

Lancet 1994; 343: 1454-59. Lancet 2002;360(9344):1455-61 N Engl J Med 2013;368:1279-90.