“We should stop using clinical practice guidelines when it comes to teaching health care providers - or should we?”

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For HANDOUT material go here https://therapeuticseducation.org/handouts
Objectives

Describe the uses and limitations of CPGs

Identify web-based resources that can be used to find CPGs

Appraise the quality of CPGs to determine how much you should trust the recommendations

Describe how to use CPGs in practice

Discuss the legal issues associated with using or not using CPGs
MY BELIEF

All Health Care Providers should have their practice underpinned by the best available evidence

Evidence-Based Practice (EBP)
Nothing in there about guidelines
EVIDENCE-BASED PRACTICE

WHAT IT IS

IT'S NOT ABOUT GUIDELINES

140/90 < 6.5% < 2.0
GUIDELINES RARELY CONSIDER PATIENT PREFERENCES

IT'S NOT ABOUT RCTs

RCTs ARE USEFUL BUT THEY ONLY HELP INFORM DECISIONS
p<0.05 = GOOD p>0.05 = BAD

IT'S NOT ABOUT CHECKBOX MEDICINE

PEOPLE DON'T FIT INTO BOXES

IT'S NOT CHECKBOX MEDICINE

IT'S NOT SOMETHING "NEW"

DOING THE RIGHT THING IS NOT A NEW IDEA

IT'S NOT NECESSARILY ABOUT INFLUENCING OUTCOMES

IT'S NOT ABOUT IGNORING BASIC SCIENCE

WE NEED TO UNDERSTAND HOW IT WORKS

IT'S NOT ABOUT SAVING MONEY

RATIONALIZING IS NOT THE MOTIVE

IT'S NOT ABOUT ZERO COMPETING INTERESTS

RESEARCH COSTS MONEY SOMEBODY HAS TO PAY FOR IT

WE NEED TO UNDERSTAND BIAS IS EVERYWHERE

WHAT IT'S NOT

IT'S NOT ABOUT GUIDELINES

IT'S NOT ABOUT RCTs

IT'S NOT CHECKBOX MEDICINE

IT'S NOT SOMETHING "NEW"

IT'S NOT ABOUT SAVING MONEY

IT'S NOT ABOUT ZERO COMPETING INTERESTS
WHAT IT IS
IT'S A WAY OF THINKING

EVIDENCE-BASED PRACTICE
BEST AVAILABLE EVIDENCE
USED IN A HIERARCHICAL WAY TO
ANSWER CLINICAL QUESTIONS

- Patient
- Intervention
- Comparator
- Outcome

BEST AVAILABLE EVIDENCE PYRAMID

Systematic review / meta-analysis
RCT
Cohort
Case Control
Case Report
"Expert" Opinion

USING CLINICAL EXPERTISE

- Diagnostician
- Knowledge Broker
- Communicator

Being Kind & Careful

INFORMING PATIENTS
& ELICITING
& INTEGRATING PREFERENCES
What is a Clinical Practice Guideline (CPG)?

The Institute of Medicine definition:

"...statements that include recommendations, intended to optimize patient care, that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options"
1997 - THE REASONS FOR INTEREST IN QUALITY CLINICAL PRACTICE GUIDELINES

“medical history is littered with clinical practice guidelines that have been fatally incorrect”

“the physician's ability to keep up with the medical literature erodes with each year's burden”

“costly and unexplained variability in medical practice”

“growing demand from patients for greater participation in medical decisions”
The Number of Guidelines
Diseases/conditions - 2,983
Treatments/interventions - 7,364

~10,000 guidelines ~10 pages each?
~100,000 pages
500 pages ~ 2 inches
400 inches ~ 33 feet ~10 meters
Highest pole vaulter ~ 20 feet ~ 6 meters
War and Peace is ~1500 pages ~ 70 copies
“Unfortunately, depending on how their reliability is measured, up to 50% of guidelines can be considered untrustworthy. This carries serious consequences for patients’ safety, resource use and health economics burden.”
Wrong guidelines: why and how often they occur

Primiano Iannone, Nicola Montano, Monica Minardi, James Doyle, Paolo Cavagnaro, Antonino Cartabello

“guideline reliability is largely over-stated, and guidelines still suffer methodological flaws, limited panel composition and conflicts of interests, making their conclusions often untrustworthy. Even when evidence-based methodology is claimed, it is often not fully adopted and the ‘evidence-based quality mark’ gets misappropriated by vested interests”
“Furthermore, no official, publicly accountable, reliable, independent and unconflicted rating agency of published guidelines exists.”
Where to find CPGs
Canadian Medical Association Infobase (Canada) - Clinical Practice Guidelines - www.cma.ca/cpgs

National Guideline Clearinghouse (USA) - www.guideline.gov

National Health Service Evidence (UK) - www.evidence.nhs.uk

Clinical Practice Guidelines Portal (Australia) - www.clinicalguidelines.gov.au

Turning Research Into Practice (TRIP) - www.tripdatabase.com

PubMed - can limit a search to practice guideline

Just do a google search
How to assess CPGs
Appraisal Tools for Clinical Practice Guidelines: A Systematic Review

“the most comprehensively validated appraisal tool is the AGREE II instrument

PLoS ONE 8(12): e82915. doi:10.1371/journal.pone.0082915
Appraisal of Guidelines for Research and Evaluation (AGREE) II

DOMAIN 1. SCOPE AND PURPOSE

DOMAIN 2. STAKEHOLDER INVOLVEMENT

DOMAIN 3. RIGOUR OF DEVELOPMENT

DOMAIN 4. CLARITY OF PRESENTATION

DOMAIN 5. APPLICABILITY

DOMAIN 6. EDITORIAL INDEPENDENCE

OVERALL GUIDELINE ASSESSMENT
How to use CPGs
Is the CPG trustworthy?

Is the CPG applicable to your patient?

Is the CPG setting similar to your practice?

Does the CPG reflect you or your patient’s values and preferences?
often “have a one-size-fits-all mentality and do not build flexibility or contextualization into the recommendations”

“greater concern, however, is that some of these consensus statements are being turned into performance measures”
“CPGs can undermine clinical growth by providing a tempting academic short-cut: memorizing clinical facts rather than learning clinical principles”
“Rather than endeavor to design a map with an answer for every question, I believe that it would be preferable to educate clinicians to handle clinical reality directly and without filtered advice”
“Bombarding students with guidelines for all scenarios ... may seem more efficient in the short-term but does little to enhance discriminatory skills and numbs the facility for critical thinking.”
Spectrum of Decisions

Immediate life-threatening issues or very “technical” work - surgery, dispensing etc - YES
Guidelines, even policies, are likely very useful

Symptom treatment - SORT OF
Each person is an experiment - need to know just what has the potential to work and the safety

Risk factor interventions - NO
At least not what CPGs are now
Guidelines would be awesome if they...

Were developed primarily by, and definitely for, the people that ultimately end up using them.

Were a credible synopsis of the best available evidence presented in a way that clinicians could easily access and interpret.

Allowed patient values and preferences to be taken into account.
Typically “evidence-based” guideline recommendations are not based on “solid” evidence

<table>
<thead>
<tr>
<th>EVIDENCE LEVEL</th>
<th>Cardiology</th>
<th>Infectious disease</th>
<th>Endocrinology</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 or A based on RCTs</td>
<td>11%</td>
<td>14%</td>
<td>6%</td>
</tr>
<tr>
<td>3 or C based on opinion</td>
<td>48%</td>
<td>55%</td>
<td>35%</td>
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The quality of clinical practice guidelines over the last two decades: a systematic review of guideline appraisal studies

Table 2  Appraisal of Guidelines, Research and Evaluation domain scores of guidelines over time (total sample=608)

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<thead>
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<tr>
<td>Scope and purpose</td>
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<td>61</td>
<td>60</td>
<td>71</td>
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<tr>
<td>Stakeholder involvement</td>
<td>18</td>
<td>38</td>
<td>33</td>
<td>37</td>
<td>0.01</td>
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<tr>
<td>Rigour of development</td>
<td>14</td>
<td>41</td>
<td>43</td>
<td>44</td>
<td>0.003</td>
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<tr>
<td>Clarity and presentation</td>
<td>32</td>
<td>56</td>
<td>55</td>
<td>68</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Applicability</td>
<td>10</td>
<td>30</td>
<td>18</td>
<td>23</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Editorial independence</td>
<td>17</td>
<td>30</td>
<td>28</td>
<td>33</td>
<td>0.26</td>
</tr>
</tbody>
</table>

Top Score = 100%

Engaging the right people, quality of evidence appraisal, providing useful tools, and competing interests have not improved in 14 years (1993-2007)

Recent examples of Guideline Quality/Rigour

AGREE II (Appraisal of Guidelines for Research and Evaluation) is the instrument typically used - 207 guidelines

- **avg 55%** - neuropathic pain - 16 CPGs - range 27%-88% - BMC Anesthesiology 2016;16:12

- **avg 30%** - hypertension - 11 CPGS - range 8%-86% - PLoS ONE 2013 8(1): e53744

- **avg 32%** - asthma - 18 CPGs - range 8%-64% - Chest 2013 144: 390-7

- **avg 48%** - diabetes - 24 CPGs - range 0%-81% - PLoS ONE 2013 8(4): e58625

- **avg 20%** - vancomycin - 12 CPGs - range 4%-73% - PLoS ONE 2013 9(6): e99044

- **avg 18%** - hypertension (China) - 17 CPGs - range 1-36% - BMJ Open 2015;5:e008099

- **avg 8%** - respiratory (China) - 109 CPGs - range 0%-27% - Chest 2015;148:759-766
Glycemic Control for Patients With Type 2 Diabetes Mellitus
Our Evolving Faith in the Face of Evidence

René Rodríguez-Gutiérrez, MD, MSc; Victor M. Montori, MD, MSc
Evidence since 1998 for
Tight glycemic control (A1c 6.5%-7%) vs less tight (A1c 7%-8.5%)

Endpoints - End Stage Renal Disease/dialysis, renal death, blindness or clinical neuropathy
5 large trials, 8 meta-analyses, 2 follow-up trials
31 estimates of outcomes
  2 (6%) suggested benefit
  29 (94%) suggested NO benefit

Endpoints - all-cause mortality, CV mortality, non-fatal MIs, stroke, amputations/ PVD
5 large trials, 10 meta-analyses, 5 follow-up trials
78 estimates of outcomes
  10 (13%) suggested benefit
  64 (82%) suggested NO benefit
  4 (5%) suggested harm

Circ Cardiovasc Qual Outcomes. 2016;9:00-00. DOI: 10.1161
Overall estimates of benefits and harms (micro and macro)

11% of estimates = a benefit
4% of estimates = harm
85% of estimates = no benefit

despite this, over the last 10 years -
“practice guidelines and published statements offer a consistent and confident consensus, with 100% of the guidelines and 77% to 100% of the statements in favor of tight glycemic control to prevent microvascular complications”
176 PRIMARY CARE guidelines in the CMA database

**CONTRIBUTORS**
- 54% non–family physician specialists
- 17% family physicians - 8% if industry sponsored
- 11% other clinicians
- 8% non-clinician scientists
- 6% nurses
- 3% pharmacists

69% of guidelines didn’t report conflicts of interest
Guideline sponsorship

2009 - 2,300 guidelines in the National Guideline Clearinghouse

Guideline development

- 41% - medical speciality societies
- 22% - government agencies/nonprofit
- 17% - professional associations
- 9% - disease specific societies
- 4% - independent expert panels

at least 2/3 are being developed by groups with a clear potential for important biases

http://www.ncbi.nlm.nih.gov/books/NBK22928/
Prevalence of financial conflicts of interest among panel members producing clinical practice guidelines in Canada and United States: cross sectional study

~50-80% of panel members on guidelines have financial COIs

BMJ 2011;343:d5621 doi: 10.1136/bmj.d5621

EVIDENCE BASED MEDICINE

Why we can’t trust clinical guidelines

Despite repeated calls to prohibit or limit conflicts of interests among authors and sponsors of clinical guidelines, the problem persists. Jeanne Lenzer investigates

BMJ;2013:346
Adding “value” to clinical practice guidelines

James P. McCormack PharmD Peter Loewen PharmD

5 Canadian Guidelines for blood pressure, cholesterol, glucose, and bone density

197 PAGES - 90,000 WORDS

99\(^{(0.1\%)}\) words - relevant to patients’ values and preferences

Can Fam Physician 2007;53:1326-27
Looked for info on
Risk estimation (magnitude)
Impact of treatment on risk
Potential harms (magnitude)

“The information presented in these documents is glucose-centric and not organized or presented in a way that could be construed as supporting shared decision making”
Guidelines

Hypertension Canada’s 2016 Canadian Hypertension Education Program Guidelines for Blood Pressure Measurement, Diagnosis, Assessment of Risk, Prevention, and Treatment of Hypertension

~11,800 words - 20 pages

Total mention of values and preferences - 0.19% of the words

“Practitioners are advised to consider patient preferences, values, and clinical factors when determining how to best apply these recommendations at the bedside”

“In the absence of Canadian data to determine the accuracy of risk calculations, avoid using absolute levels of risk to support treatment decisions”
Benefits
No numbers whatsoever for fracture risk or fracture benefit
Do present info in an appendix - new studies

Harms
28 numeric mentions of side effects
6 absolute numbers
22 relative numbers

One mention of patient preferences

Recommendation 6: ACP recommends that clinicians should make the decision whether to treat osteopenic women 65 years of age or older who are at a high risk for fracture based on a discussion of patient preferences, fracture risk profile, and benefits, harms, and costs of medications. (Grade: weak recommendation; low-quality evidence)
“Evidence is insufficient to determine the comparative effectiveness of pharmacologic therapy or the superiority of one medication over another, within the same class or among classes, for prevention of fractures”

The data also do not support monitoring BMD during the initial 5 years of treatment in patients receiving pharmacologic agents to treat osteoporosis. Clinicians should select generic drugs to treat osteoporotic patients when possible
“The data do not support monitoring BMD during the initial 5 years of treatment in patients receiving pharmacologic agents to treat osteoporosis.”
BENEFIT - 88% of study authors concluded that participants overestimated benefits

HARM - 67% underestimated harm
Evaluating physician understanding of harms and benefits of common tests and therapies

Paper survey to residents and attending internal medicine physicians
– 18 questions – 117 people responded

<table>
<thead>
<tr>
<th>Estimate of benefit in absolute terms</th>
<th>Percent of respondents</th>
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<tbody>
<tr>
<td>Green cells are the correct answer</td>
<td>&lt;1%</td>
</tr>
<tr>
<td></td>
<td>1 to 5%</td>
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<td></td>
<td>5 to 10%</td>
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<td>10 to 20%</td>
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<td></td>
<td>20 to 45%</td>
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<td></td>
<td>45 to 70%</td>
</tr>
<tr>
<td></td>
<td>70 to 100%</td>
</tr>
</tbody>
</table>

| Mild HTN 5 years                    | 11 25 32 29 19 7 4 1 |
| Aspirin with risk factors 5 years  | 11 25 32 29 19 7 4 1 |
| Aspirin in CVD 5 years             | 0 16 29 30 16 8 8 0  |
| Warfarin in Afib 1 year            | 3 31 29 17 12 8 0  |
| Hip fracture osteoporosis 5 years  | 3 24 30 24 13 5 0  |
| Death from bleed with PPI 5 years  | 21 22 20 24 19 9 9 1  |
| Cancer diagnosis among + screening | 4 14 23 35 18 7 0  |
| Major bleeding with ASA 5 years    | 21 46 21 8 3 0 0  |
| Major bleeding with warfarin 1 year| 14 42 30 11 2 2 0  |
| Unnecessary biopsy with screening 10 years | 1 9 15 33 26 15 0  |

- 79% overestimated benefit
- 66% overestimated harm
- 67% were unconfident
### Results

<table>
<thead>
<tr>
<th>Patients</th>
<th>Median acceptable absolute % benefit threshold</th>
<th>% that would take a “safe” drug for 5 years</th>
<th>Absolute % benefit they felt they were getting from their drug</th>
<th>% who wanted to be told percent chance of benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post MI patients</td>
<td>20</td>
<td>32</td>
<td>69</td>
<td>70</td>
</tr>
<tr>
<td>On drugs</td>
<td>20</td>
<td>29</td>
<td>74</td>
<td>68</td>
</tr>
<tr>
<td>No drugs</td>
<td>30</td>
<td>21</td>
<td>56</td>
<td>-</td>
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307 subjects using a written questionnaire and interview.
Ability of clinicians to make an estimate of CHD risk

53 residents, 8 fellows, 18 attending physicians

The **mean degree of over-estimation** compared to the Framingham estimate:

- low-risk scenarios - **7.8 times**
- medium-risk scenarios - **2.8 times**
- high-risk scenarios - **1.5 times**
What is "High Risk"?

Chance of a heart attack in the next 5 years (%)

- **Clinicians**
- **Patients**

- 1-3%
- 4-5%
- 6-10%
- 11-20%
- 21-30%
- 31-40%
- 41-50%
- 51-75%
- 76-100%
Qualitative study using semi-structured interviews

“Many of the preferences expressed by the clinicians and lay people in this study are at odds with recommendations in guidelines”
Differing perceptions of intervention thresholds for fracture risk: a survey of patients and doctors

Did NOT ask patients to consider side effects or drug cost, just the dosing regimen, in the decision

“A typical patient in our study required a 50% absolute fracture risk and 50% relative risk reduction (giving an absolute risk reduction of 25%) before considering long-term drug therapy”

A prominent current guideline ... recommends pharmacologic intervention at thresholds of 10- year risk of 20% for major osteoporotic fracture or 3% for hip fracture

125 (77%) of doctors would recommend treatment
24 (21%) of our patient cohort would consider treatment justified

Osteoporos Int 2012;23:2135–40
LIPIDS

AIM-HIGH, HPS2-THRIVE (niacin)
ACCORD (fibrates)
dalOUTCOMES (dalcetrapib)
STABILITY (darapladib)

BLOOD PRESSURE

ALTITUDE (aliskiren)
VALISH, AASK, ACCORD (aggressive BP lowering)

DIABETES

ACCORD, ADVANCE, VADT (aggressive A1c lowering)
ROADMAP (olmesartan)
ORIGINATE (insulin)

SAVOR-TRAJIMA 53 (saxagliptin)
EXAMINE (alogliptin)
ALECARDO (alegliptin)

GENERAL

VISTA-16 (varespladib)
ALECARDIO (alegliptin)

182,000+

1) EMPA-REG OUTCOME (empagliflozin) - 1.6% ARR over 3 years

2) LEADER (liraglutide) - 1.8% ARR over 4 years

3) SPRINT (aggressive A1c lowering) - 1.6% ARR (CVD) over 3 years but also 1.8% ARI (Kidney)

4) HOPE 3 - statins YES, BUT blood pressure no benefit

5) FOURIER - 1.6% ARR over 2 years BUT $15,000/year

BUT!!!!

1) ACCELERATE (evacetrapib) - increased HDL (130%), reduced LDL (40%) - no CVD benefit
“In three quarters of the cancer studies … the majority of patients preferred shared or autonomous decision making. In contrast, this was true for only about half of the studies with non-disease specific study populations”

“the number of patients who prefer participation has increased over the past three decades so that the majority of patients prefer to participate in decisions”
Guidelines and the Law

“As per the Canadian Medical Association Handbook on Clinical Practice Guidelines, guidelines should NOT be used as a legal resource in malpractice cases as “their more general nature renders them insensitive to the particular circumstances of the individual cases.”
Even an authoritative CPG may NOT be found to be determinative of a standard of care.

It is prudent for physicians to be aware of authoritative clinical practice guidelines relevant to their practices. If a clinical decision may be perceived as being contrary to a recognized and accepted CPG, a physician, where appropriate, may consider the following steps: consult with a colleague or relevant specialist, discuss reasonable treatment options with the patient, and document the patient's consent for the chosen treatment.

If deviating from an established CPG, physicians should consider documenting the rationale for doing so, as well as any discussions with the patient about such variance.
Many courts (UK, US, CA)

“The reasonable-patient standard … requires physicians and other health care practitioners to disclose all relevant information about the risks, benefits, and alternatives of a proposed treatment that an OBJECTIVE PATIENT would find material in making an intelligent decision as to whether to agree to the proposed procedure”

JAMA 2016;315:2063-4
Of 16 publications on 14 common conditions, 10 widened and 1 narrowed definitions.

Widen by 3 methods: (i) “pre-disease”; (ii) lowering thresholds; (iii) earlier or new diagnostic methods.

None had rigorous assessment of potential harms of proposed changes.

The average proportion of members with industry ties was 75%; 12/16 chairs had ties.
There are LOTS of guidelines

Often don’t provide a solid synopsis/systematic review of the best available evidence

Often don't provide sufficient information to do shared-decision-making or even support the concept

Many “conflicts” and ownership issues

Patient expectations are often at odds with guideline recommendations

Legal precedents are leaning in favour of benefit/harm communication
Education and Guidelines

Obviously inform you that CPG’s exist

We all need to discuss up front the limitations and issues of clinical practice guidelines

We need to know how to appraise and integrate the best available evidence

Admit we don't have answers for everything

We need to help you think for yourselves and use common-sense

Need to be allowed to make “mistakes”

It is totally OK to go “against” the guidelines
The Guideline Solution?

What should guidelines contain?

Who should write them?

What should they not contain?

Are there examples of well-done guidelines?
Guidelines should provide ballpark estimates of what happens if you DON’T treat/test/screen and if you DO treat/test/screen.
Guidelines would be awesome if they...

Were developed primarily by, and definitely for, the people that ultimately end up using them.

Were a credible synopsis of the best available evidence presented in a way that clinicians could easily access and interpret.

Allowed patient values and preferences to be taken into account.
An Example of a Guideline that Promotes Discussion Rather than Treatment

Simplified lipid guidelines
Prevention and management of cardiovascular disease in primary care

G. Michael Allan MD CCFP  Adrienne J. Lindblad ACPR PharmD  Ann Comeau MN NP CCN(C)  John Coppola MD CCFP
Brianne Hudson MD CCFP  Marco Mannarino MD CCFP  Cindy McMinis  Raj Padwal MD MSc
Christine Schelstraete  Kelly Zarnke MD MSc FRCP  Scott Garrison MD PhD CCFP  Candra Cotton
Christina Korownyk MD CCFP  James McCormack PharmD  Sharon Nickel  Michael R. Kolber MD CCFP MSc

Can Fam Physician 2015;61:857-67
Reducing Your Risk for Heart Attacks & Strokes
A SHIFT IN THINKING...

What's Changed?
If you asked anyone how to reduce your risk of a heart attack or stroke, they'd likely hear them mention the need to lower your cholesterol.
However, many studies have shown that improving cholesterol does not always reduce the risk of cardiovascular disease (heart attack or stroke). By worrying only about cholesterol, we might miss something important about health.

CHOLESTEROL ONLY TELLS US PART OF YOUR HEART HEALTH STORY

Are statins right for you?
You decide. Speak with your healthcare provider about your risk of cardiovascular disease and the benefits and risks of taking statins. Regardless of your decision, your healthcare provider will support you!

Medication
Statin therapy should be discussed with all people with moderate to high cardiovascular risk (10% or more). Your healthcare provider can explain your risk and how statins can reduce that risk by 25-35%.

STATINS CAN REDUCE YOUR RISK OF HEART ATTACK AND STROKE BY 25% TO 35%

A low-dose of ASA (Aspirin®) may also be recommended for further risk reduction if you are at high cardiovascular risk (20% or more) or have had a heart attack or stroke. ASA reduces cardiovascular risk by about 12.5% (half or third as effective as statins). Note – ASA can cause bleeding.

What are the side effects of statins?
All drugs come with some potential side effects.

Most Common
1 in every 10 to 20 people – muscle aches or stiffness

1 in every 10,000

This number is an educated guess of your chances of developing cardiovascular disease in the next 10 years. For example, a 10% risk means you have about a 1 in 10 chance of having a heart attack or stroke in the next 10 years.

What can you do to reduce your risk of heart attack or stroke?

Eat healthy – be active – don't smoke

These lifestyle choices reduce your risk of cardiovascular disease and benefit your overall health.

Exercise or a Mediterranean diet can reduce your risk of heart attack and stroke by 30%.

Tested?
Not taking a statin → You should continue to have your cholesterol tested every 5 years.

Taking a statin → No. Once you have decided to take a statin, a cholesterol test is unnecessary – statins help to reduce your cardiovascular risk no matter what your cholesterol level. So knowing your cholesterol level would not change your treatment plan.

Are statins right for you?
You decide. Speak with your healthcare provider about your risk of cardiovascular disease and the benefits and risks of taking statins. Regardless of your decision, your healthcare provider will support you!
Thresholds for discussion, not thresholds for treatment