Rapid recommendations

Updates from 2020 guidelines: part 1

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Staying current with rapidly evolving guideline recommendations is a well-known barrier to implementing novel clinical approaches. Delays in integrating medical advancements can impact patient health benefits. This article highlights guideline recommendations that have changed in 2020 to help identify potential areas a family physician might want to explore further before implementing into practice. Family physicians should be aware that some of the recommendations are based on low-quality evidence or expert opinion and should be critically considered before integrating them into practice.

Guideline updates

Diabetes Canada recommends sodium-glucose cotransporter-2 inhibitors (SGLT2Is) or glucagonlike peptide-1 receptor agonists (GLP1-RAs) in patients with diabetes and either heart failure (HF), chronic kidney disease (CKD), established atherosclerotic cardiovascular disease (ASCVD), or age older than 60 years of age with cardiovascular risk factors.[1] Risk factors are defined as smoking, hypertension, dyslipidemia, and central obesity. Metformin continues to be first-line pharmacotherapy. When advancing or adjusting treatments, consider using SGLT2Is for patients with HF, CKD, or ASCVD. There is grade A evidence for using GLP1-RAs in patients 60 years of age or older with risk factors, and grade B evidence for GLP1-RA use in those with ASCVD or CKD. This approach is supported by the American Diabetes Association.[2] For further details, see **Table 1**.[1,2]

The Canadian Cardiovascular Society (CCS) and the Canadian Heart Failure Society recommend using SGLT2Is in HF with reduced ejection fraction* without *concomitant diabetes (conditional recommendation, high-quality evidence).[3,4] The DAPA-HF (Dapagliflozin and Prevention of Adverse Outcomes in Heart Failure) and EMPEROR-Reduced (Empagliflozin Outcome Trial in Patients with Chronic Heart Failure and a Reduced Ejection Fraction) trials found that patients with HF and no diabetes on guideline-directed medical therapy (GDMT) and dapagliflozin or empagliflozin had a decrease in all-cause mortality and cardiovascular death, hospitalization, and worsening HF (DAPA-HF hazard ratio = 0.74, 95% CI 0.65 to 0.85, $P < .001$; EMPEROR-Reduced hazard ratio = 0.75, 95% CI 0.65 to 0.86, $P < .001$),[5] an outcome that was similar in patients with concomitant diabetes. Most patients were on triple therapy and 11% to 19% were on an angiotensin receptor neprilysin inhibitor. A meta-analysis has since found this to be a class effect.[6]

A statement from the Journal of the American College of Cardiology Scientific Expert Panel recommends indefinite treatment with GDMT for patients with HF with recovered ejection fraction.[7] Heart failure with recovered ejection fraction is defined as a baseline left ventricular ejection fraction of less than 40% with an absolute improvement of 10% or greater and a second measurement greater than 40%. In these cases, improved left ventricular function represents remission and not cure. When GDMT is withdrawn, there is an increased risk of recurrence of HF. The authors recommend biomarkers and an electrocardiogram every 6 to 12 months; cardiac magnetic resonance imaging after 1 year of clinical stability; and a 2-dimensional echocardiogram every 6 months until 18 months and then every 1 to 3 years.

Hypertension Canada endorses a target systolic blood pressure of less than 120 mm Hg in patients with nondiabetic CKD who meet criteria for the SPRINT (Systolic Blood Pressure Intervention Trial).[8] A more aggressive target of systolic blood pressure less than 110 mm Hg should be used in polycystic kidney disease. This paper also addresses alcohol consumption, stating that there is no safe limit and recommending reduced consumption or abstinence for all patients to prevent and treat hypertension. Hypertension incidence increases with 1 or more alcoholic drinks per day in men and 2 or more drinks per day in women. In addition, the diagnostic threshold for home blood pressure measurements for patients with diabetes has not been established and clinicians should obtain at least 3 measurements of office blood pressure at 130/80 mm Hg or higher done on different days to make a diagnosis of probable hypertension. Finally, consider a pregnancy test before initiating pharmacotherapy.

The CCS recommends opportunistic screening for atrial fibrillation (AF) for all patients aged 65 or older during medical encounters (strong recommendation, low-quality evidence).[9] Opportunistic pulse checks provide efficient and cost-effective screening of asymptomatic AF and have a number needed to screen of 69 for patients 65 years of age or older. Pulse palpation continues to be the cornerstone diagnostic test despite having lower specificity than blood pressure monitors, plethysmographs, or single-lead electrocardiograms. This recommendation aligns with the European Society of Cardiology 2020 guideline.[10]

Table 1. Recommended advanced treatment for patients with diabetes, identified by grade of evidence

	ESTABLISHED DISEASE											
	ATHEROSCLEROTIC CARDIOVASCULAR DISEASE			CHRONIC KIDNEY DISEASE			HEART FAILURE			RISK FACTORS*		
	OUTCOME			OUTCOME			OUTCOME			OUTCOME		
TREATMENT	MACE	HHF	NEPHRO	MACE	HHF	NEPHRO	MACE	HHF	NEPHRO	MACE	HHF	NEPHRO
SGLT2I												
• Empagliflozin	A	B	B	C	A	A		A				
• Canagliflozin	B	B	B	B	A	A		A			B	C
• Dapagliflozin		B	B		A	A		A			B	C
GLP1-RA												
• Semaglutide SC	B			B						C		
• Liraglutide	A			B						B		
• Dulaglutide	A									A		

GLP1-RA—glucagonlike peptide-1 receptor agonist, HHF—hospitalization for heart failure, MACE—major cardiovascular event, NEPHRO—progression of nephropathy, SC—subcutaneous, SGLT2I—sodium-glucose co-transporter-2 inhibitor.
*Risk factors include smoking, hypertension, dyslipidemia, and central obesity.
Recommendations from Diabetes Canada[1] and the American Diabetes Association.[2]

The CCS recommends an initial rhythm control strategy for stable patients with AF onset in the past 12 months (weak recommendation, moderate-quality evidence).[9] In these patients, rhythm control reduces rates of stroke and cardiovascular death. Rhythm control decreases the risk of progression to AF that is irreversible and less amenable to treatment.[10] For persistent AF, rhythm control continues to be preferred in patients who are highly symptomatic, have greatly impaired quality of life, have multiple recurrences of AF, have difficulty achieving rate control, or have arrhythmia-induced cardiomyopathy. Outside of this 12-month window, rate control and rhythm control have equal cardiovascular outcomes.

The Heart and Stroke Foundation of Canada recommends against *the use of acetylsalicylic acid for primary prevention of vascular events, regardless of risk factors (level A recommendation).*[11] This recommendation pertains to individuals without a vascular event but does not apply to patients with asymptomatic atherosclerosis (eg, asymptomatic plaques found on imaging studies of carotid, coronary, or peripheral arteries), as the net benefit is unclear. In systematic reviews, the only demonstrated benefit was a reduced composite cardiovascular outcome, although it was outweighed by the risk of major bleeding events (number needed to treat=265 vs number needed to harm=210). There was, however, a small net benefit in patients with diabetes (number needed to treat=91 vs number needed to harm=112), creating another area of uncertainty. Authors of the systematic review make the point that not initiating a medication is not the same as discontinuing.[12,13]

The Canadian Task Force on Preventive Health Care recommends against screening for esophageal adenocarcinoma and precursors in patients with chronic gastroesophageal reflux disease (strong recommendation, very low-certainty evidence).[14] Precursors include Barrett esophagus and dysplasia. Although using screening endoscopy in patients with chronic gastroesophageal reflux disease identifies more cases of esophageal carcinoma early, it has no change in long-term survival and all-cause mortality. According to the task force, 93% of esophageal adenocarcinomas are diagnosed while investigating alarm symptoms.[14]

The Centers for Disease Control and Prevention, the US Preventive Services Task Force, the American Association for the Study of Liver Diseases, and the Infectious Diseases Society of America recommend that adults 18 years of age or older be screened at least once for hepatitis C virus (HCV) infection (grade B recommendation).[15-17] This recommendation pertains to all asymptomatic adults, including pregnant patients, and is in addition to risk-based screening. It addresses the increased prevalence of HCV infection with the highest rates of increase in young adults aged 18 to 40 (13% increase between 2014 and 2018), women of reproductive age (increase of 40% to 50% between 2009 and 2014), and infants born to HCV-infected mothers (increase of 68% between 2011 and 2014).[15-18] The Canadian Association for the Study of Liver's 2018 statement recommends cohort-based screening (for adults born between 1945 and 1975),[19] and the Canadian Task Force on Preventive Health Care[20] and the Public Health Agency of Canada[21] recommend screening solely on the basis of risk.

Conclusion

This article is part 1 of a series that summarizes guideline updates in cardiac care, diabetes, and gastroenterology. Through further appraisal and exploration of these topics, family physicians can build upon their knowledge or confirm their current clinical practice.

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Competing interests
None declared

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