Guideline Update 2024: Applications to Primary Care

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Objectives

-Review the G-TRUST Guideline Scorecard, consider how clinical practice guidelines may not be applicable to primary care.

-Evaluate several updated Clinical Practice Guidelines:

ACC/AHA Heart Failure
VA/DoD Low Back Pain
AAFP Blood Pressure
AAP Hyperbilirubinemia in Newborns

-Think about how you might apply these recommendations to your patient panels

Professional Organization X comes out with a new Practice Guideline. We in primary care should:

A. Read through it and incorporate any updates into our practice
B. Wait to see if AAFP or other primary care organization I trust endorse the guideline before applying it
C. Grade the guideline yourself.

Steps for clinicians when approaching a new guideline:

1. Be skeptical!
2. Identify a trusted source of guidelines that follow good practices. AAFP is a good resources for this.
3. Consider using the G-TRUST tool to review the guideline for trustworthiness and utility.

Challenges with Practice Guidelines

-produced by various sources: professional organizations, disease advocacy groups, government agencies, insurance plans.

-in 2009 a search for diabetes guidelines on the National Guideline Clearinghouse website yields more than 500 documents!!!!

-intellectual and financial conflicts of interest, lack of adherence to recommended standards for guideline development.

Best Guidelines

-Based on Systematic Reviews. Comprehensive, systematic evidence search

-Evidence is linked directly to the recommendations, and a strength of recommendation provided

-Patient oriented outcomes (vs disease oriented)

-Transparency

-Minimal conflicts of interest

-Prospective Validation

-Recommendations that offer flexibility in different clinical situations.

Briefly- review of HTN guidelines!

32% of recommendations were concordant in direction of recommendation (do this, or don't do this) and strength.

41% were inconsistent! Ie: varying treatment targets, varying initial therapies.

Authors of this editorial could not find any causes for guideline inconsistency after reviewing role of strength or source of recommendations, or importance of recommendations.

Explanations

-developers likely value some outcomes more than others

-When evidence is lacking experts provide their best guesses

-Recommendations may extrapolate beyond the research

-Panel lacks relevant stakeholders (ie patients, primary care clinicians)

-Oversimplification- application of a one size fits all

-others: overcomplication, application and money

Best measure: does the guideline improve patient outcomes? Is this a POEM?

Relevance and utility	Yes	Can't tell	No
The recommendations focus on improving patient-oriented outcomes, not disease-oriented outcomes, explicitly comparing benefits vs. harms to support clinical decision-making. *How to tell:* The recommendations are based on demonstrated direct benefits for patient outcomes and not biochemical markers or risk factors.		Stop	Stop
The recommendations are clear and actionable. *How to tell:* The recommendations provide explicit guidance. If there is no decision tree or algorithm, there should be sufficient detail to inform collaborative decision-making in your clinical setting.			
The patient populations and conditions are relevant to my clinical setting. *How to tell:* The guideline should explain the target conditions, target populations, practice settings, and audience to which the recommendations apply. Do the recommendations apply to your practice?			
Trustworthiness			
The guidelines are based on a systematic review of the research data. *How to tell:* Determine whether the recommendations are linked to a systematic review of the available literature. If there is no mention of a systematic literature search, the guideline is not trustworthy.		Stop	Stop
The recommendations important to you are based on graded evidence and include a description of the quality (e.g., strong, weak) of the evidence. *How to tell:* GRADE, SORT, U.S. Preventive Services Task Force, or other strong evidence-rating systems are used to grade the available evidence and the majority of the recommendations are supported by high-quality evidence.		Stop	Stop
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Any Stop items: guideline not useful.

No answers:

0-1=Useful

2=may not be useful

>3=not useful.

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Case 1:

George Smith is a 73 year old with PMH of HTN and preDM as well as HFpEF with a prior echo showing an EF of 55%.

Current medications are lisinopril 40 and amlodipine 10.

He comes in today complaining of increased SOB and leg edema.

Vitals: BP 140/84, HR 82, RR 18. Weight up 8lbs since last visit 8 weeks ago.

You send him for an updated echo: EF now 40-45%.

Questions:

EF 40-45%, increased SOB and edema.

1. What Stage Heart Failure is Mr Smith in? (A,B,C,D)
2. What NYHA class is he currently? (I,II, III, IV)
3. What classification of HF is he in now? (HFpEF, HFmrEF, HFreF, HFimpEF)
4. What will your treatment recommendations be?

2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines FREE ACCESS

Clinical Practice Guideline: Full Text

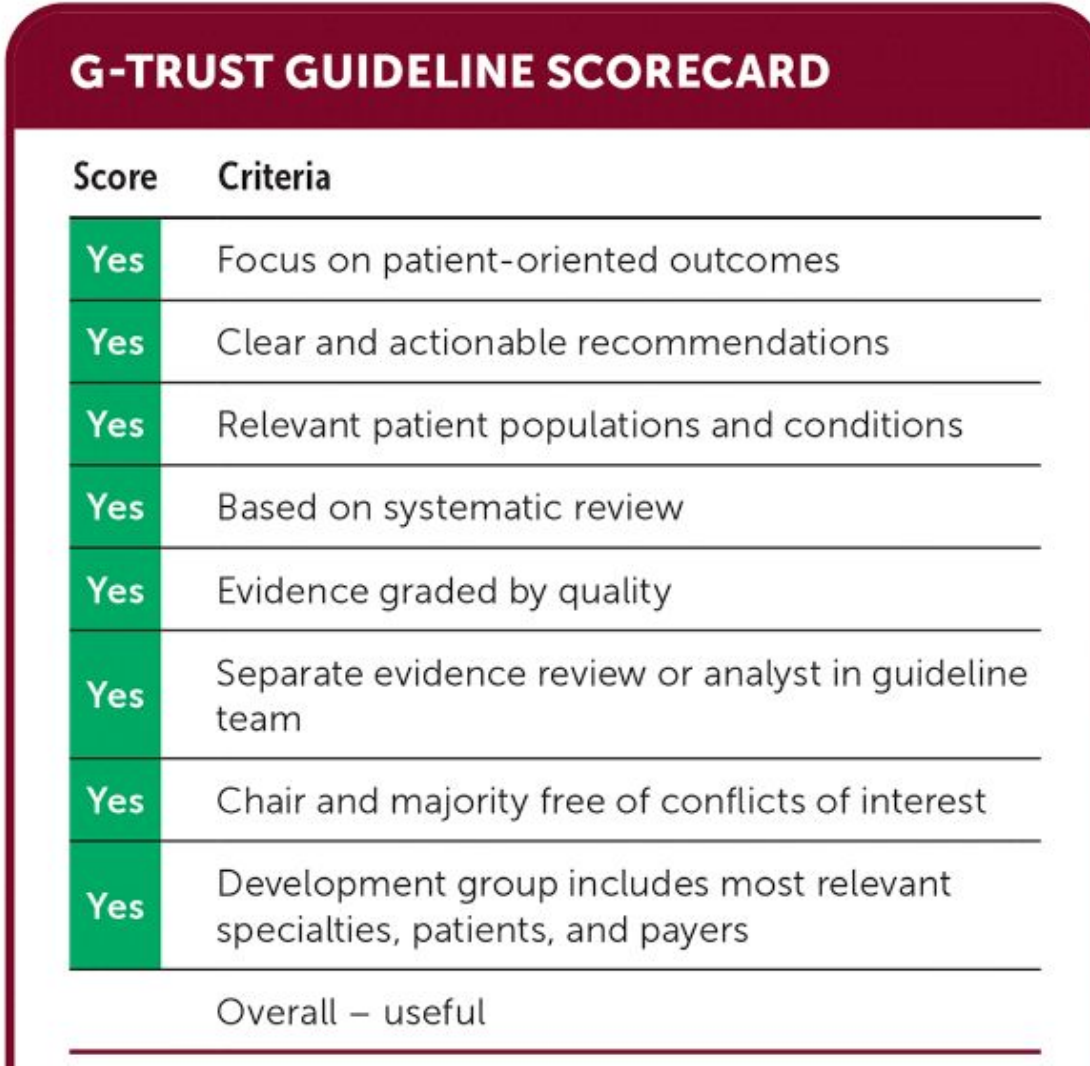
Paul A. Heidenreich, Biykem Bozkurt, David Aguilar, Larry A. Allen, Joni J. Byun, Monica M. Colvin, Anita Deswal, Mark H. Drazner, Shannon M. Dunlay, Linda R. Evers, James C. Fang, Savitri E. Fedson ... SEE ALL AUTHORS

J Am Coll Cardiol. 2022 May, 79 (17) e263–e421

Clinical Practice Guideline: Executive Summary: 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: Executive Summary: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines

Guideline evaluated by AAFP Sept 2023.

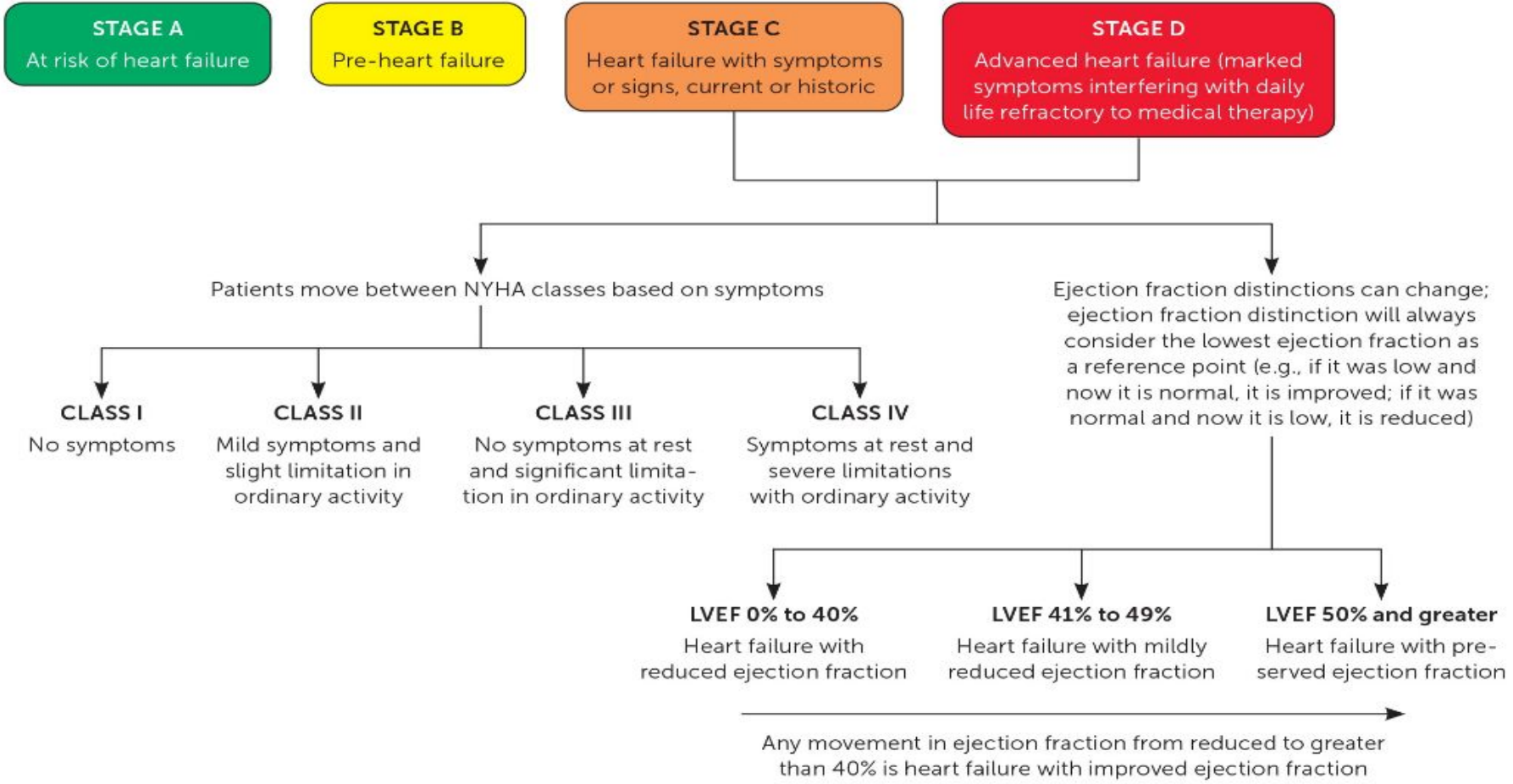
Deemed Useful.



G-TRUST GUIDELINE SCORECARD

Score	Criteria
Yes	Focus on patient-oriented outcomes
Yes	Clear and actionable recommendations
Yes	Relevant patient populations and conditions
Yes	Based on systematic review
Yes	Evidence graded by quality
Yes	Separate evidence review or analyst in guideline team
Yes	Chair and majority free of conflicts of interest
Yes	Development group includes most relevant specialties, patients, and payers
	Overall – useful

What stage? What NYHA class?:



Ejection Fraction

LVEF>50%: HFpEF

LVEF 41-49%: HFmrEF

LV<40%: HFrEF

LVEF that has improved from <40% to >40%: HFimpEF.

Treatment by Stage:

Stage A (at risk of HF): SGLT2 should be prescribed for patients w diabetes. Goal is to reduce hospitalization by reducing risk of sx HF.

Treatment by Stage

Stage B (pre-heart failure: structural changes in heart but asx; can include HFrEF, congenital heart disease, valvular heart disease with impaired hemodynamics)

ACE-i: cornerstone of treatment in stage B- reduce progression to sx HF/reduce mortality.

LVEF<40/ NYHA Class 1: ACE, control comorbidities, cardioprotective BB if hx MI/ACS.

LVEF>40: Control comorbidities.

Treatment by Stage

Stage C: structural changes and previous or current symptoms.

Patients with symptoms should receive all 4 components of guideline-directed medical therapy (GDMT).

(estimated) to reduce all-cause mortality by 73% vs no treatment.

Treatment by Stage

Stage D: sx HF refractory to goal-directed medical therapy

Usually need specialist involvement.
Advanced therapies: transplants, LVADs

Palliative care/hospice

GDMT

HFrEF (EF <40%)

Renin-angiotensin inhibitors: ARB/neprilysin inhibitor, ACE-i, ARBS. All are effective in reducing mortality in heart failure.

ARB/neprilysin inhibitor- recommended in patients with reduced LVEF and NYHA class II or III symmtpoms to reduce M&M.

-Can use ACE for cost/other reasons. ARB is 3rd line.

GDMT

HFrEF (EF<40%)

Beta blockers: Treatment with cardioprotective BB reduces risk of death and combined risk of death or hospitalization.

Can start during initial hospitalization.

**cardioprotective BB shown to reduce mortality:bisoprolol, carvedilol, metoprolol ER

GDMT

HFrEF (EF<40%)

Mineralocorticoid receptor antagonists: Reduces all-cause mortality.

Spironolactone and eplerone.

Avoid in patients with GFR<30.

D/c if hyperkalemia.

GDMT

HFrEF (EF<40%)

SGLT-2 inhibitors: Use recommended regardless of DM status. Reduced all-cause mortality (NNT 63 over one year) and reduced hospitalizations.

Risks: GU infection, euglycemic DKA.

*intermediate economic value

GDMT

HFrEF (EF<40)

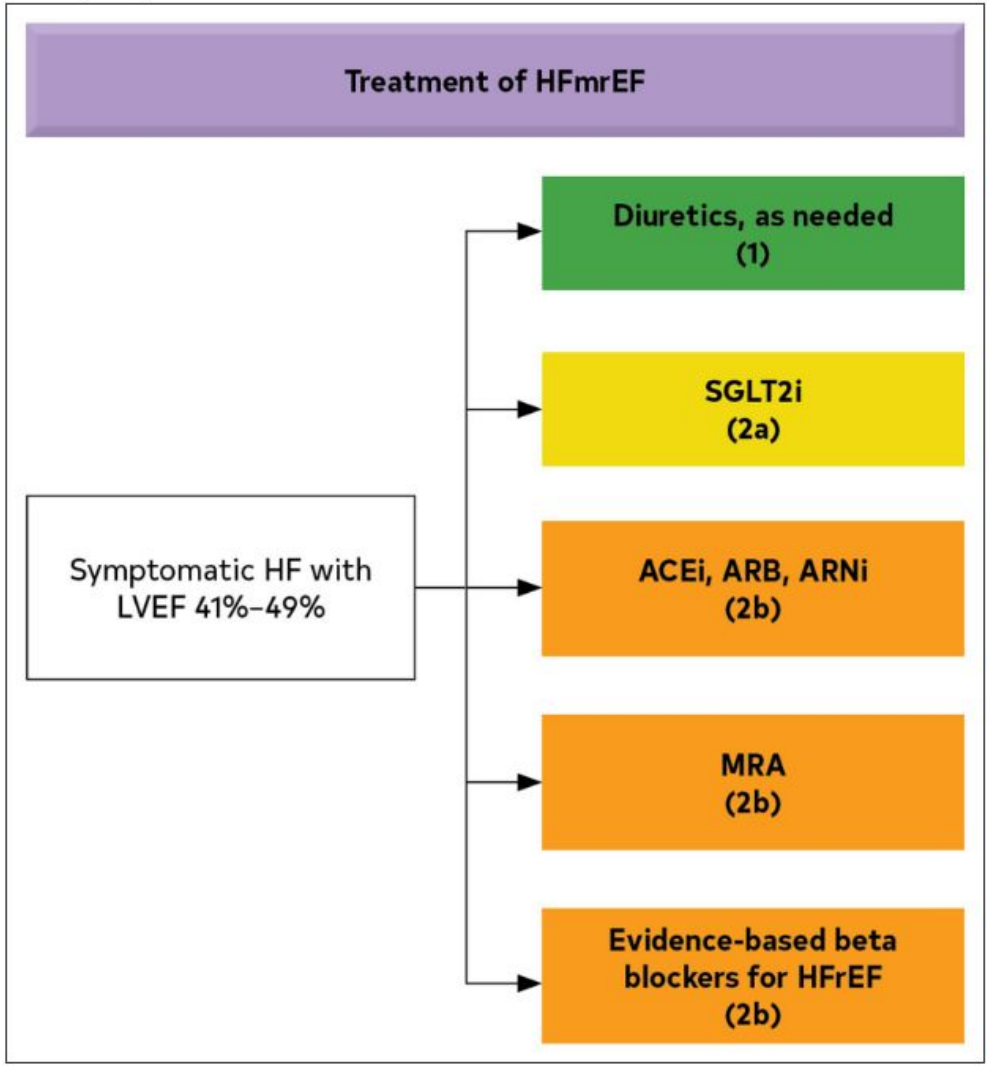
Hydralazine and isosorbide.
Guidelines recommend these for people who self-identify as AA and with NYHA class III or IV sx to improve sx and reduce M&M.

Can also use this combo i patients who can’t be given first line treatment.

HFmrEF (EF 41-49%)

Diuretics when evidence of fluid overload.

Post-hoc analysis of trials suggest that all elements of GDMT benefit these patients.



HFimEF

The management of patients whose EF improves with therapy is uncertain.

One study-- stopping GDMT lead to HF relapse in 40% in 6 months.

HFpEF (EF>50%)

~½ clinically dx HF cases.

GDMT does not seem to improve outcomes.

Diuresis for fluid overload.

SGLT-2 appear to improve outcomes.

One trial- spironolactone mildly reduced hospitalizations.

DIURETICS

Used for symptom management

ICD/Pacemaker

ICD: reduce all cause mortality(NNT 70 over 1 year) in sx patients with EF<35% or as patients w EF<30%.

--Strongest evidence→patients with non-ischemic dilated CM or ischemic disease who are >40 days post MI and receive GDMT, and have life expectancy of >1 year.

Pacemaker: strongest evidence for EF<35%, sinus rhythm, LBBB and widened QRS with HF sx on GDMT.

Common meds used in primary care to AVOID in HF

All exacerbate underlying Myocardial dysfunction:

NSAIDS- all. Prostaglandin inhibition=Na and water retention, increase vascular resistance, blunted response to diuretics

TZDs

Doxazosin. Beta-1 receptor stimulation=increased renin and aldosterone.

Diltiazem

Verapamil-- all 3 are negative ionotropes. Nifedipine less problematic.

Nifedipine

Questions

EF 40-45%, increased SOB and edema.

1. What Stage Heart Failure is Mr Smith in? C
2. What NYHA class is he currently? II/III
3. What classification of HF is he in now? HFmrEF
4. What will your treatment recommendations be?

-diuretics for sx management

-consider SGLT-2 inhibitor

-consider GDMT

Aafp key points for practice

Key Points for Practice

• Given the evidence of delayed progression and decreased mortality, certain interventions should be started in patients at risk of heart failure who do not have symptoms.

• Guideline-directed medical therapy can reduce all-cause mortality by 73% compared with no treatment.

• If ejection fraction improves with guideline-directed medical therapy, stopping medications is associated with a high recurrence risk.

• In symptomatic heart failure, care from multidisciplinary teams is associated with improvements in mortality and function.

Take home m ne

1. Guideline-directed medical therapy (GDMT) for heart failure (HF) with reduced ejection fraction (HFrEF) now includes 4 medication classes that include sodium-glucose cotransporter-2 inhibitors (SGLT2i).
2. SGLT2i have a Class of Recommendation 2a in HF with mildly reduced ejection fraction (HFmrEF). Weaker recommendations (Class of Recommendation 2b) are made for ARNi, ACEi, ARB, MRA, and beta blockers in this population.
3. New recommendations for HFpEF are made for SGLT2i (Class of Recommendation 2a), MRAs (Class of Recommendation 2b), and ARNi (Class of Recommendation 2b). Several prior recommendations have been renewed including treatment of hypertension (Class of Recommendation 1), treatment of atrial fibrillation (Class of Recommendation 2a), use of ARBs (Class of Recommendation 2b), and avoidance of routine use of nitrates or phosphodiesterase-5 inhibitors (Class of Recommendation 3: No Benefit).
4. Improved LVEF is used to refer to those patients with previous HFrEF who now have an LVEF >40%. These patients should continue their HFrEF treatment.
5. Value statements were created for select recommendations where high-quality, cost-effectiveness studies of the intervention have been published.
6. Amyloid heart disease has new recommendations for treatment including screening for serum and urine monoclonal light chains, bone scintigraphy, genetic sequencing, tetramer stabilizer therapy, and anticoagulation.
7. Evidence supporting increased filling pressures is important for the diagnosis of HF if the LVEF is >40%. Evidence for increased filling pressures can be obtained from noninvasive (eg, natriuretic peptide, diastolic function on imaging) or invasive testing (eg, hemodynamic measurement).
8. Patients with advanced HF who wish to prolong survival should be referred to a team specializing in HF. A HF specialty team reviews HF management, assesses suitability for advanced HF therapies, and uses palliative care including palliative inotropes where consistent with the patient's goals of care.
9. Primary prevention is important for those at risk for HF (stage A) or pre-HF (stage B). Stages of HF were revised to emphasize the new terminologies of "at risk" for HF for stage A and pre-HF for stage B.
10. Recommendations are provided for select patients with HF and iron deficiency, anemia, hypertension, sleep disorders, type 2 diabetes, atrial fibrillation, coronary artery disease, and malignancy.

Case 2

Jeanne Frank is a 68 year old you are seeing in clinic today for low back pain. It started 2 weeks ago and has not gotten better. No injury. Just started hurting and has worsened. Usually attends water aerobics 2x per week but has stopped for past 5 weeks after cataract surgery.

Has tried tylenol and flexeril.
Seen chiropractor.

Similar thing a few years ago.

Denies urinary or bowel changes, no fevers,no trauma.

PMH: AF, HTN, GERD, osteopenia, Depression, DM2.

Questions

68 year old 2 weeks of LBP, no injury. Very bothersome.

1. Should you order imaging?
2. What non-pharmacological therapies might you offer?
3. What medications can you recommend?
4. Is there a role for injections?

VA/DoD CLINICAL PRACTICE GUIDELINE FOR THE DIAGNOSIS AND TREATMENT OF LOW BACK PAIN

Department of Veterans Affairs
Department of Defense

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Score	Criteria
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Note: See related editorial, Where Clinical Guidelines Go Wrong, at

Low Back Pain

Affects 84% of adults inUS at some point.

Nearly 40% adults will have experienced this type of pain in the pat 3 months.

Leading cause of disability worldwdie.

Evaluation

Initial eval: focus on identifying serious underlying conditions.

Red flags are most reliable indicators of serious or progressive neuro deficits and serious conditions that warrant immediate imaging.

Exam- has limited use. Most special tests have low accuracy.

Unless there are focal neuro deficits or red flags imaging does not improve outcomes.

Obtaining an MRI for low back pain increases probability of surgery x 13!

Early imaging also associated with increased opiate use, higher costs of care, higher pain scores, more work absence.

Red Flag Findings

Finding	Suggested condition
New urinary retention	Cauda equina
Saddle sensation disturbance	Cauda equina
Bladder fullness	Cauda equina
Abnormal neurologic examination	Serious or progressive neurologic deficit
Fever or other signs	Infection
Hemoglobin < 10 g per dL (100 g per L)	Cancer, epidural hematoma
History of intravenous drug use and previous infection	Epidural abscess (LR+ = 14)
Indwelling vascular catheter	Epidural abscess (LR+ = 16)
Recent spine fracture	Epidural abscess (LR+ = 10)
Trauma and neurologic deficit	Vertebral fracture (LR+ = 31)
History of cancer and clinical suspicion of cancer	Cancer (LR+ = 28)
Older than 75 years and recent trauma, osteoporosis, pain ≥ 7 out of 10, or thoracic pain	Vertebral fracture: if more than one finding in an older patient, risk of fracture is at least 42%

Non-pharmacological treatments

CBT- small improvements in pain/functional status after 4-12 visits.

Mindfulness- less helpful. Outcomes the same as usual care.

Exercise- structured exercise programs improve pain, function, and disability. Beneficial programs: aerobic exercise, aquatic exercise, mechanical therapies. Pilates, strength training, structured walking program, tai chi. Nearly every activity is beneficial!

Lumbar supports and mechanical traction- do not improve pain or function.

Complementary Therapies

Spinal manipulation and mobilization- not enough research to support a recommendation. Studies do seem to demonstrate benefit.

Acupuncture- appears effective for chronic LBP. Reduced back pain x 1 year, no benefit at 2 years.

Not enough data for acute back ain.

Cupping, laser, TENs, US therapy- do not improve pain or disability in LBP.

MEDICATIONS- BENEFICIAL

Duloxetine Chronic LBP**.** 1 additional patient will experience at least a 30% reduction in pain compared to placebo.

--Many will not find a clinically relevant decrease.

--discontinuation common-- nausea, insomnia, dry mouth, constipation, fatigue.

NSAIDS. Chronic LBP. NSAIDS reduce pain by 30% compared to placebo. NNT 6 over 4-12 weeks.

Use >12 weeks show NSAIDS equivalent to placebo.

MEDICATIONS- UNCERTAIN BENEFIT

TCA- pain and function similar when compared to placebo.

Gabapentin and Pregabalin- Very low quality evidence suggests pregabalin leads to moderate improvement in pain and function.

Gabapentin does not improve pain or function in LBP compared to placebo.

Both associated with significant adverse effects, potential for misuse.

Muscle relaxants- small SR, mod improve pain and function in first several days. Adding cyclobenzaparine to NSAID after 1 week does not improve pain/function. No better than placebo for chronic LBP.

Steroids- do not improve pain in acute or chronic LBP. May be slight improvement in disability in acute back pain (smal study, acute radiculopathy 15 day taper led to slightly greater improvement vs placebo for up to a year).

Topicals-No enough evidence.

Diet/Supplements- No specific diet/supplement has evidence of benefit. VIt D does not improve outcomes.

MEDICATIONS- AVOID

Acetaminophen- not beneficial in LBP. Large SR vs placebo found no difference in pain, disability, QOL, function through 12 weeks.

Opioids- improve pain and function for up to 4 months, long term risks are high without proven benefit.

Recent study- suggests tramadol may not improve pain or function. Another study suggest oxycodone ER may not improve function.

Benzos- does not improve pain or function compared to NSAID alone. In chronic LBP a SR did not find benefit over placebo.

Nonsurgical interventions

Radiofrequency ablation- improves pain for up to 36 months, but no improvement disability or QOL.

Epidural steroids- improve pain by 0.75 points on a 10 point scale (?relevant), do not improve function.

Intra-articular facet joint injections- no benefit compared to placebo.

Sacro-illiac injections- benefit uncertain.

Spinal cord stimulation- no meaningful improvement back or leg pain, or QOL

PRP/Stem cell injections- limited evidence.

Questions

68 year old 2 weeks of LBP, no injury. Very bothersome.

1. Should you order imaging? No- no red flags or neuro deficits
2. What non-pharmacological therapies might you offer? PT, encourage regular exercise, get back into water aerobics,
3. What medications can you recommend? Probably nothing!
4. Is there a role for injections? No.

AAFP Key points for Practice

• Because no treatments for low back pain are clearly superior, patients should be engaged in shared decision-making about whether to consider nonpharmacologic, pharmacologic, or watchful waiting approaches to managing acute or chronic low back pain.

• Cognitive behavior therapy modestly improves pain and function in chronic low back pain.

• Although medications have limited benefit in low back pain, NSAIDs and duloxetine have the strongest evidence for benefit.

• Acetaminophen does not improve pain or function in low back pain compared with placebo.

Case 3:

Frank Jones is a 73 year old in otherwise good health here today in follow up on his blood pressure.

His BP at the office today is 148/84.

His home BP has been running 140s-150s/80-90.

Current meds: lisinopril 20mg.

Questions

73 year old male BP running 140s-150/80-90

What is your blood pressure goal for Frank?

Is one BP regimen preferred over another?

AMERICAN FAMILY PHYSICIAN®

PRACTICE GUIDELINES

Blood Pressure Targets in Adults With Hypertension: A Clinical Practice Guideline From the AAFP

Reason for Guideline

Goal of treatment: reduce M&M while minimizing harms from interventions.

Significant debate around ideal BP targets, numerous guidelines available.

AAFP: prev endorsed JNC 8. Also developed a joint guideline with ACP in 2017. Both now out of date.

AAFP declined to endorse other guidelines due to difference in methodological rigor, insufficient consideration of harms, management of conflicts of interest.

Need for guidance for primary care providers.

Goal: Identify evidence based BP treatment targets that incorporate patient risks and values while minimizing harmds. Improve patient- oriented outcomes.

Comparison of Recommended Blood Pressure Targets in Recent Guidelines

Guideline	18 to 59 years of age (mm Hg)	60 to 69 years of age (mm Hg)	70 to 79 years of age (mm Hg)	Older than 80 years (mm Hg)
2022 American Academy of Family Physicians*	< 140/90	< 140/90	< 140/90	< 140/90
2022 National Institute for Health and Care Excellence[13]	< 140/90	< 140/90	< 140/90	< 150/90
2021 European Society of Hypertension Council[14]	< 130/80†	< 130/80†	< 140/80	< 140/80
2020 International Society of Hypertension‡[44]	< 130/80	< 140/90§	< 140/90	< 140/90
2020 U.S. Department of Veterans Affairs/U.S. Department of Defense‖[15]	< 130/90¶	< 150/90	< 150/90	< 150/90
2017 American College of Cardiology/American Heart Association*[16]	< 130/80	< 130/80	< 130/80	< 130/80
2017 American College of Physicians and American Academy of Family Physicians[11]	—	< 150/90	< 150/90	< 150/90
2014 Eighth Joint National Committee[10]	< 140/90	< 150/90	< 150/90	< 150/90

Patient oriented clinical outcomes prioritized

Total mortality

CV mortality

CV events (stroke, MI)

Adverse events.

Recommendations

#1. AAFP strongly recommends treating adults who have HTN to a standard BP target (<140/90) to reduce the risk of all-cause and cardiovascular mortality. Strong recommendation, high-quality evidence.

Treating to a lower BP target (<135/85) does not provide additional benefit at preventing mortality; however, a lower BP target could be considered based on patient preferences and values.

Recommendations

#2. AAFP recommends clinicians consider treating adult who have HTN to a lower BP target (< 135/85) to reduce the risk of MI (weak recommendation, moderate-quality evidence).
Although treatment to a target of 140/90 reduced the risk of MI, there was a small additional benefit observed with a lower BP target.
There was no observed additional benefit in preventing stroke with the lower BP target.

Limitations of Guideline

- Heterogeneity in participants’ risk of cardiovascular events across trials
- Different blood pressure targets in the groups assigned to lower targets
- No analysis of benefits and harms of specific antihypertensive drug classes
- Lack of consistent reporting of harms across trials

Relevance and utility	Yes	Can't tell	No
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Questions

73 year old male BP running 140s-150/80-90

What is your blood pressure goal for Frank?

Is one BP regimen preferred over another?

Case 4

You are rounding on a 1 day old newborn.

Baby was born at 39 and 3 days GA.

Exclusively breastfed.

TcBilii was 14. A serum Bili was obtained and is 13.

Experienced parents, would like to discharge today.

Questions

39 and 3 week well baby. Breastfeeding. TsBili 13 at 24 hours.

Can they discharge?

Does this baby need phototherapy?

If you start phototherapy when can you discontinue it?

PEDIATRICS®

Article Navigation

FROM THE AMERICAN ACADEMY OF PEDIATRICS | CLINICAL PRACTICE GUIDELINE | AUGUST 05 2022

Clinical Practice Guideline Revision: Management of Hyperbilirubinemia in the Newborn Infant 35 or More Weeks of Gestation FREE

PDF

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What's new?

- Highlights the challenge of identifying G6PD deficiency in infants.
- Bases follow-up testing on the difference between bilirubin level and the phototherapy threshold. No more risk zones!
- Raises thresholds for phototherapy and exchange transfusion.
- Includes gestational age and risk factors for neurotoxicity in the thresholds.
- Adds when to check for rebound after stopping phototherapy.
- Offers how to provide intensive phototherapy and when home phototherapy is an option.
- Introduces “escalation of care” for serum bilirubin close to exchange transfusion level.

Bilitool.org

Has been updated to reflect new guideline.

Big changes:

-better clarity of neurotoxicity risk factors vs hyperbili risk factors

-incorporates GA into the calculation

-increased treatment thresholds

-allows you to input bilirubin trends and makes recommendations

Home Phototherapy Criteria

>38 weeks GA

At least 48 hours

Well appearing

Feeding adequately

No neurotoxicity risk factors

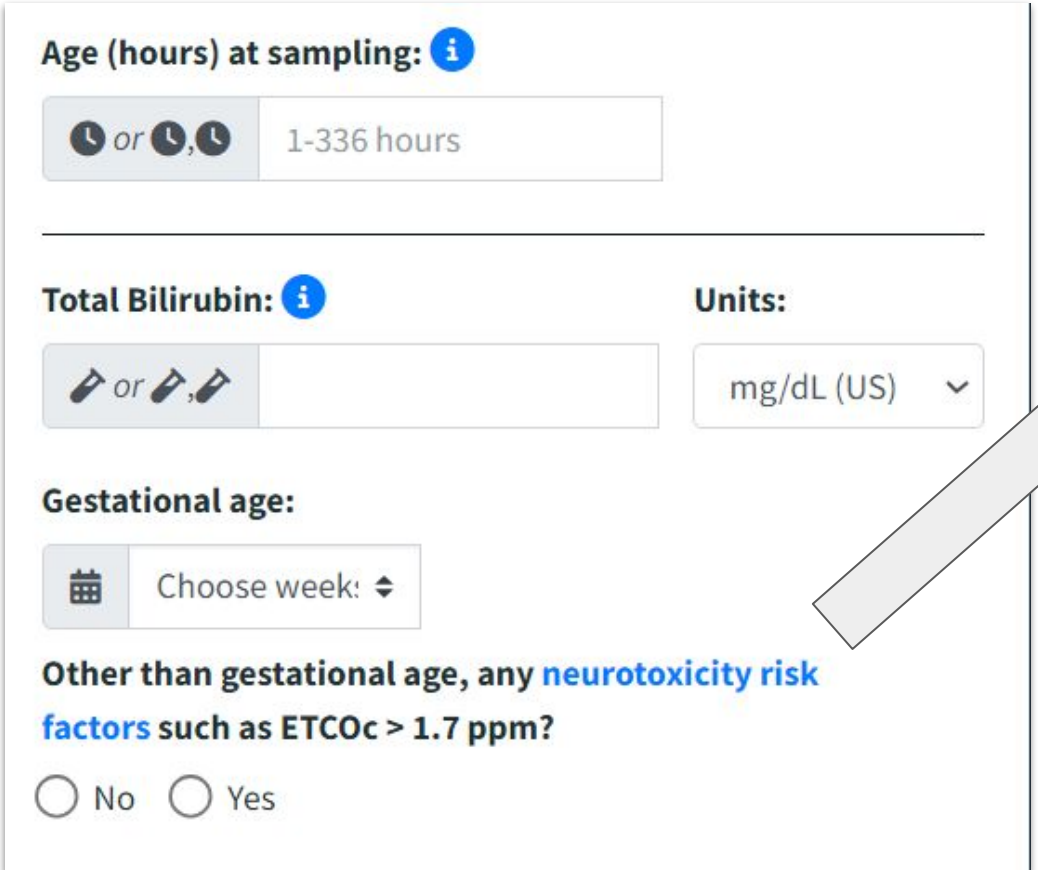
Has not been receiving phototherapy

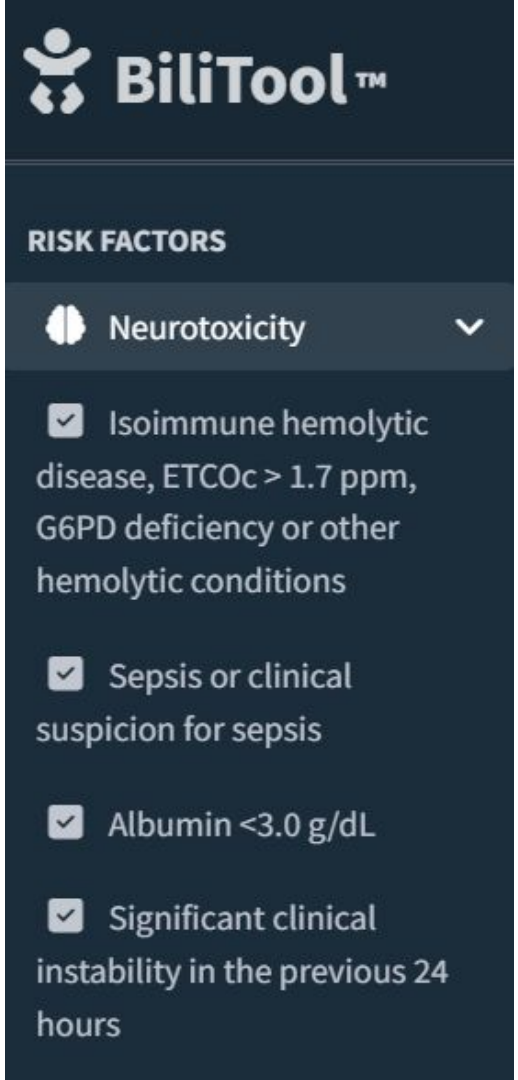
Serum bili <1mg/dl above phototherapy threshold

Able to return for daily serum bili checks

If receiving home phototherapy: admit if bili increase to >1mg/dl above phototherapy threshold

A few key navigation points for bilitool.org





Incorporating bili trends

Age (hours) at sampling:

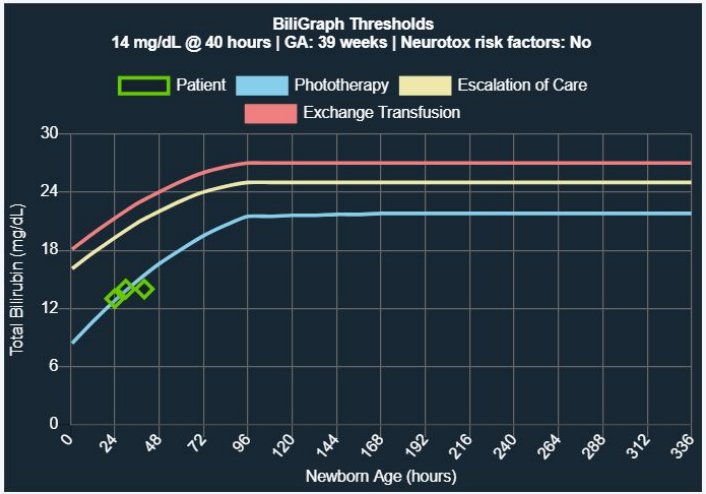
or

24, 48, 72

Total Bilirubin:

or

9.6, 16.2, 17.3



Recommendations Copy to Clipboard

	Recommendation	Threshold
If using TcB, confirm with TSB?	**Yes**	12.5 mg/dL
Phototherapy?	**No**	15.4 mg/dL
Escalation of Care? (More »)	**No**	21.3 mg/dL
Exchange Transfusion?	**No**	23.3 mg/dL

Postdischarge Follow Up

For the baby **1.4 mg/dL** below the phototherapy threshold (**Δ-TSB**) at 40 hours of age (during birth hospitalization with no prior phototherapy):

Measure TSB in 4 to 24 hours.

Options:
(1) Delay discharge and consider phototherapy.
(2) Discharge with home phototherapy if all considerations in the guideline are met.
(3) Discharge without phototherapy but with close follow-up.

Questions

39 and 3 week well baby. Breastfeeding. TsBili 13 at 24 hours.

Can they discharge?

Does this baby need phototherapy?

If you start phototherapy when can you discontinue it?

Summary:

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