





Sudden Cardiac Arrest (SCA) Prevention Pathways and Tools Objectives

- **Facilitate** optimal care for post-MI and HF patients at risk for SCA
- **Educate** healthcare providers and patients about SCA and treatment options and increase awareness and patient access to diagnostics and lifesaving therapies
- **Promote** evidence-based, guideline-recommended medical and device therapy and increase guideline awareness and adoption among healthcare providers
- **Assist** hospitals and practices in closing treatment gaps by providing practical information, disease management, and communication tools to identify and treat patients at risk for SCA

SCA Prevention Medical Advisory Team:

Gregg Fonarow, MD
Nancy Albert, PhD, RN
David Cannom, MD
William Lewis, MD
Julie Shea, MS, RNCS
Mary Norine Walsh, MD

Beta Blocker Inpatient/Outpatient Treatment Algorithm

Patients with heart failure and systolic dysfunction
Asymptomatic, mild, moderate, or severe symptoms

- Patient exclusion criteria:**
- Cardiogenic shock
 - Unstable or decompensated heart failure
 - Symptomatic hypotension
 - Symptomatic bradycardia without a pacemaker
 - Heart block > 1st degree without a pacemaker
 - Severe reactive airway disease

Guideline Recommended Beta Blockers for HF³

	Carvedilol	Sustained-release metoprolol succinate	Bisoprolol
Initial dose	3.125 mg bid	12.5-25 mg qd	1.25 mg qd
Titration steps⁵	6.25 mg bid 12.5 mg bid	50 mg qd 100 mg qd 150 mg qd	2.5 mg qd 5 mg qd
Target dose⁶	25 mg bid ⁷	200 mg qd	10 mg qd

If volume overload develops, continue BB unless⁴:

- Cardiogenic shock
- Systemic hypotension
- Narrow pulse pressure
- Cold, clammy skin
- Rising BUN/serum Cr

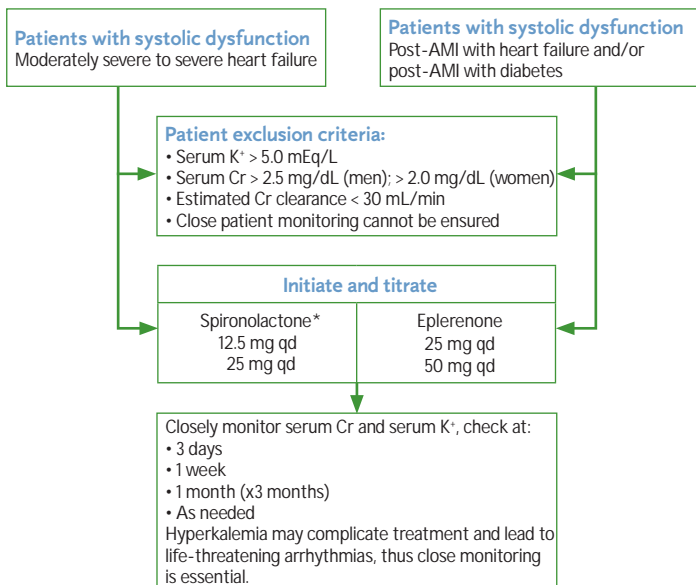
© 2007 by SCA Prevention, Inc. All rights reserved. SCA Prevention, Inc. is a registered trademark of SCA Prevention, Inc.

SCA Prevention, Inc. is a registered trademark of SCA Prevention, Inc.
IM EHF, Inc. is a registered trademark of IM EHF, Inc.
M.I. is a registered trademark of M.I. Inc.

2007

 SCA PREVENTION
PATHWAYS AND TOOLS

Aldosterone Antagonist Inpatient/Outpatient Treatment Algorithm



ACEI, A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ



Reference Sources

Farrington GC, et al. CA, et al. IM, et al. EHF, et al. D, et al. I, et al. *Circulation*. 2006;113(21): 789 (A # 15).

Hughes A, et al. C, et al. MH, et al. ACC/AHA 2005 Guidelines for the Diagnosis and Management of Chronic Heart Failure in the Adult: A Writing Group of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Writing Committee to Update the 2001 Guidelines for the Evaluation and Management of Heart Failure). *Circulation*. 2005;112(12): 154-235.

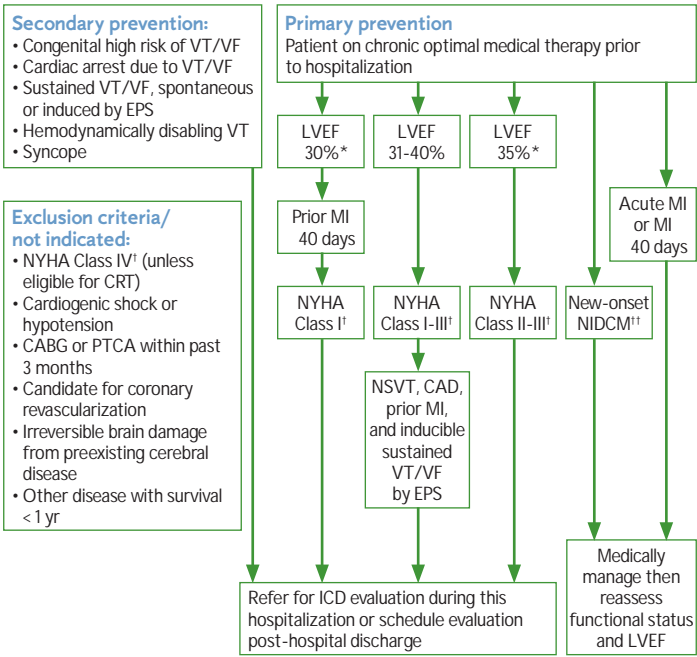
DeBorja, et al. F, et al. B, et al. A, et al. M, et al. I, et al. H, et al. E, et al. I, et al. B, et al. *N Engl J Med*. 2003;348(14): 1309-1321.

DeBorja, et al. F, et al. J, et al. A, et al. E, et al. I, et al. *N Engl J Med*. 1999;341(10):709-717.

K, et al. C, et al. J, et al. D, et al. H, et al. G, et al. F, et al. D, et al. C, et al. H, et al. E, et al. *Eur Heart J*. 2005;26(11):1115-1140.



Implantable Cardioverter Defibrillator (ICD) Therapy Inpatient Algorithm



Refer for ICD evaluation during this hospitalization or schedule evaluation post-hospital discharge

Medically manage then reassess functional status and LVEF

* C I, F ...
 CM ... ICD ... (NIDCM) > 9 ... NYHA C II III ... EF • 35%.
 ... NIDCM > 3 ... NYHA C II, III ... FDA-
 ... EF • 35% ... M ...
 ... BIDE ... CM ... A ...
 C ... N ... C ... D ... (ACC-NCD).

Cardiac Resynchronization Therapy (CRT) Inpatient Algorithm

Patient on chronic optimal medical therapy
prior to hospitalization

LVEF 35%



Refer for CRT/CRT-D evaluation during this
hospitalization or schedule evaluation post-
hospital discharge

Note:

Anticoagulation Therapy in Atrial Fibrillation Outpatient Algorithm

Patients with left ventricular systolic dysfunction
and permanent, persistent, or paroxysmal AF*

Patients with prosthetic
heart valves

*Atrial fibrillation (AF) with left ventricular systolic dysfunction (LVSD)

Clinical decision support tool (CDST) for AF with LVSD

A. AF

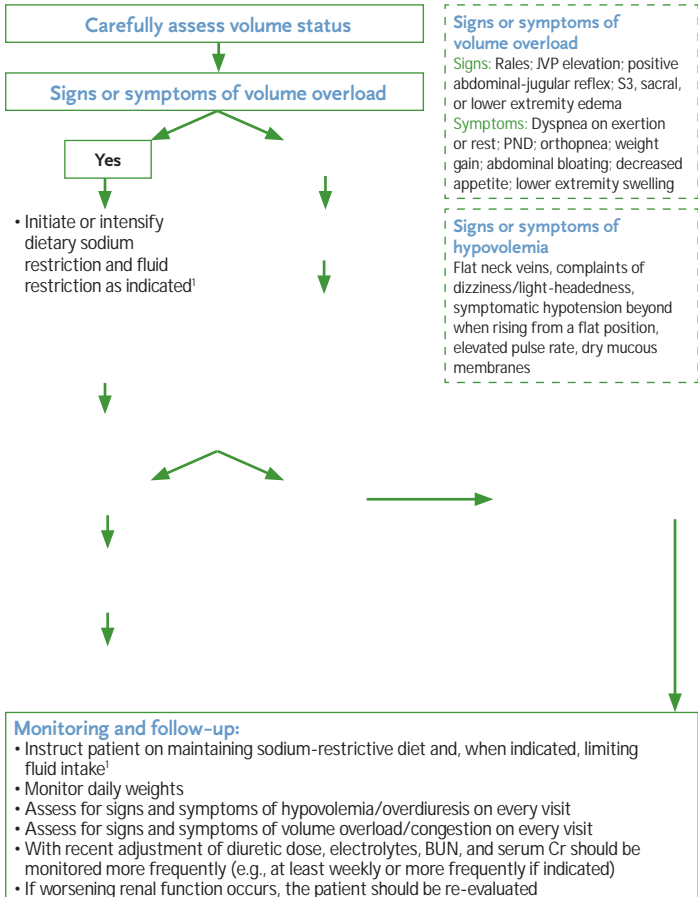
with LVSD (ejection fraction < 40%) and CHA₂DS₂-VASc score ≥ 2

or CHA₂DS₂-VASc score ≥ 1 and HAS-BLED score ≤ 3

or CHA₂DS₂-VASc score ≥ 1 and HAS-BLED score ≤ 2

or CHA₂DS₂-VASc score ≥ 1 and HAS-BLED score ≤ 1

Management of Volume Overload Outpatient Algorithm

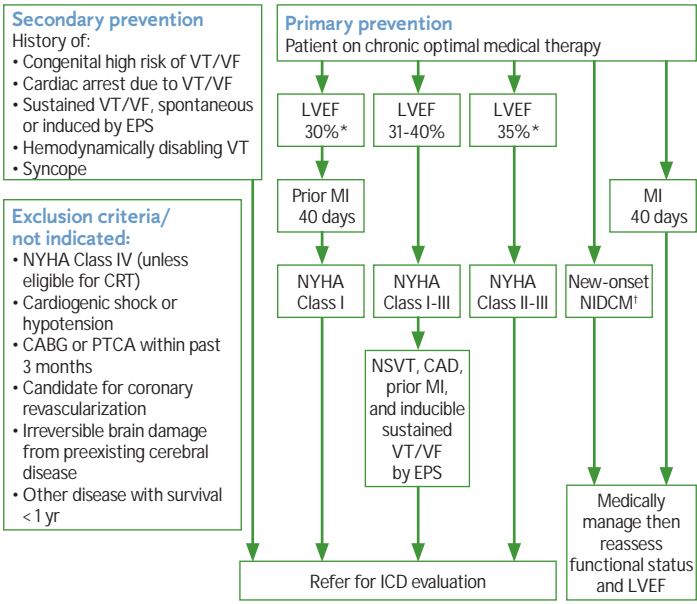




SCA PREVENTION

PATHWAYS AND TOOLS

Implantable Cardioverter Defibrillator (ICD) Therapy Outpatient Algorithm



*C I...
 CM (NIDCM) > 9 NYHA C II III EF • 35%.
 EF • 35% NIDCM > 3 NYHA C II III FDA-
 BIDE CM (ACC-NCD).

© 2008 by the American Society of Environmental Health Professionals. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of the American Society of Environmental Health Professionals.

AMERICAN SOCIETY OF ENVIRONMENTAL HEALTH PROFESSIONALS
1000 M STREET, N.W.
WASHINGTON, D.C. 20004
TEL: 202-462-1000
WWW.ASEHPE.ORG

 **SCA** PREVENTION
PATHWAYS AND TOOLS

© 2008



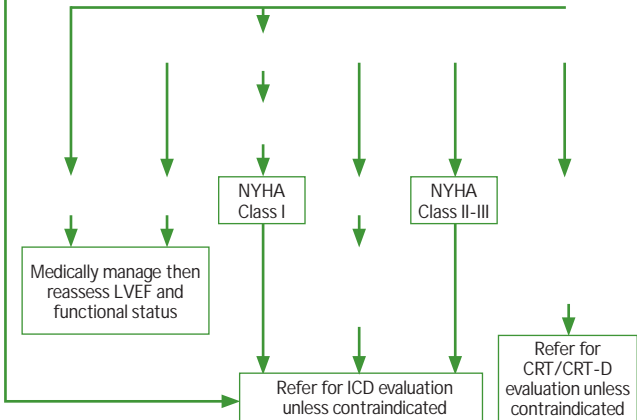
Cardiac Resynchronization Therapy (CRT) Outpatient Algorithm

Patient on chronic optimal medical therapy

Inpatient to Outpatient Transition Algorithm for Medical and Device Therapy

Secondary prevention:

- Congenital high risk of VT/VF
- Cardiac arrest due to VT/VF
- Sustained VT/VF, spontaneous or induced by EPS
- Hemodynamically disabling VT
- Syncope



References

- 1. [Faint, illegible text]
- 2. [Faint, illegible text]
- 3. [Faint, illegible text]

[Faint, illegible text]

A. [Faint, illegible text] CA, [Faint, illegible text] M. [Faint, illegible text]
 [Faint, illegible text] IM [Faint, illegible text] EHF, [Faint, illegible text]
 [Faint, illegible text] M [Faint, illegible text].



A. [Faint, illegible text] 2007

SCA PREVENTION PATHWAYS AND TOOLS

Guideline Recommendations for Heart Failure Device Therapy

