Medtronic Engineering the extraordinary

Transcutaneous Electrical Nerve Stimulation (TENS)

CRM Technical Services Standard Letter

The guidance provided in this letter is for healthcare providers and Medtronic representatives and applies to the following Medtronic device models:

Non-MRI Conditional Device Model Number, Model Name, Description	MRI Conditional Device Model Number, Model Name, Description
C6TR01 VIVA™ CRT-P Digital pacemaker with cardiac resynchronization therapy (OAE-DDDR) **P1501DR** ENRHYTHM® Dual Chamber Rate Responsive Pacemaker with RapidRead™ Telemetry (OAE-DDDR) **C2TR01** SYNCRA® CRT-P Digital pacemaker with cardiac resynchronization therapy (OOE-DDDR) **C4TR01** CONSULTA® CRT-P Digital pacemaker with cardiac resynchronization therapy (OAE-DDDR)	**RVDR01** REVO MRI ®SURESCAN ® Dual Chamber Pacemaker with SureScan® Technology (OAE-DDDR) **MC1AVR1** Micra™ AV MR Conditional dual chamber transcatheter pacing system with SureScan™ technology (VDD) **MC1VR01** Micra™ MR Conditional single chamber transcatheter pacing system with SureScan™ technology (VVIR) **MC2AVR1** Micra™ AV2 MR Conditional dual chamber transcatheter pacing system with SureScan™ technology (VDD) **MC2VR01** Micra™ VR2 MR Conditional single chamber transcatheter pacing system with SureScan™ technology (VVIR)

This Standard Letter addresses TENS:
TENS (including neuromuscular electrical stimulation or NMES) is a pain control technique that uses electrical impulses passed through the skin to stimulate nerves. A TENS device is not recommended for in-home use by cardiac device patients due to a potential for oversensing, inappropriate therapy, inhibition of pacing, or asynchronous pacing. If a TENS device is determined to be medically necessary, contact a Medtronic representative for more information.

PATIENT MANAGEMENT GUIDANCE
This document is useful to health care professionals who perform medical procedures on patients with Medtronic implanted cardiac device systems and who consult with the patients' cardiologists.

Labeling
VIVA™ CRT-P C6TR01 Clinician Manual. Manual Document Number: M956337A001 REV. C, www.medtronic.com/manuals

ENRHYTHM® P1501DR Reference Manual. Manual Document Number: M950679A001 REV. B, www.medtronic.com/manuals

SYNCRA® CRT-P C2TR01 Clinician Manual. Manual Document Number: M950693A001 REV. C, www.medtronic.com/manuals

CONSULTA® CRT-P C4TR01 Clinician Manual. Manual Document Number: M950678A001 REV. C, www.medtronic.com/manuals

REVO MRI® SURESCAN® RVDR01 Implant Manual. Manual Document Number: M954624A001 REV. A, www.medtronic.com/manuals

Micra™ AV MC1AVR1 MR Conditional Device Manual. Manual Document Number: M042501C001 REV. A, www.medtronic.com/manuals

Micra™ MC1VR01 MR Conditional Clinician Manual. Manual Document Number: M042502C001 REV. A, www.medtronic.com/manuals

***Micra™ AV2 MC2AVR1 MR Conditional Device Manual*.** Manual Document Number: M019277C001 REV. E, www.medtronic.com/manuals

***Micra™ VR2 MC2VR01 MR Conditional Device Manual*.** Manual Document Number: M019292C001 REV. E, www.medtronic.com/manuals

Additional comments

For further information please contact the following:

Technical questions: Medtronic Technical Services can answer additional questions regarding these device operations.
Device labeling: For additional device-specific guidance**,** consult the labeling associated with the device available on the Medtronic Manual Library website at www.medtronic.com/manuals

How to contact U.S. CRM Technical Services: Email: tshelp@medtronic.com
Pacemakers: (800) 505-4636, ICDs: (800) 723-4636, Programmer Support: (800) 638-1991

This information is verified for devices approved in the U.S. and may differ by country. For product-specific information on device operation and indications for use, reference the appropriate product labeling.