

Ujctgf"Ogfkecn"Cr r qkp v o gpvu" Tqng"kp"vjg"Qrkqkf"Grkfg o ke"Gtc<"C"Vqqn"hq  
Kpv g i tcv kqp"qh"Ectg

5A`8Ui a i<5`7`cb!FjYfU `UbXG\Yffm'Bm\_]Y`

'HSDUWPHQW RI 3V\FKLDWU\ DQG %HKDYLUDO +HDOWW\W)CHRULPL &BO,QMVHURID WHLGLQFLQ\B QBB\$UVLW\ +HUEHU  
'HSDUWPHQW RI 3V\FKLDWU\ <DOH 8QLYHUVLW\ DQG \$37 )RXQGDWLRQ 6XEVWDQFH \$EXVH \$VVLVWDQFH 7  
'HSDUWPHQW RI \$GGLFWLRQ 0HGLFLQH &UR]HU BQS .HV\WRQH +HDOWK 6\VWHP &KHVWHU  
7cffYgdcbX]b[ Uih\cf. +\$ &RORQ 5LYHUD \$GGLFWLRQ 3V\FKLDWULVW 'HSDUWPHQW RI 3V\FKLDWU\ <DOH 8QL  
7UHDWPHQW 1HZ +DYHQ 86\$ 7HO ( PDLO +HFWRU FRORQ ULYHUD#YD JRY  
FYWY]jYX'XUH. \$SULO 5WWYdIYX'XUH. 0D\ DiV]g\YX'XUH. -XQH  
7cdmf]I\h. 'DXP \$0 HW DO 7KLV LV DQ RSHQ DFFHVV DUWLFOH GLVWULEXWHG XQGHU WKH WHUPV RI W  
XVH GLVWULEXWLRQ DQG UHSURGXFWLRQ LQ DQ\ PHGLXP SURYLGHG WKH RULJLQDO DXWKRU DQG VRXL

### 5VghfUWh

0HGLFDOLWV HQFRPSDVV PXOWL SOH PHGLFDO LVVXHV OH DYLQJ OLWWOH WLPH  
VXFK DV PHGLFDWLRQ DVVVLVWHG WUHDWPHQW 0\$7 IRU RSLRLG XVH GLVRUGHUV  
2IILFH %DVHG 2SLRLG 7UHDWPHQW 2%27 DV PDQ\ SK\VLFLDQV H[SUHVV FRQFHUQ  
WKH FXUUHQW WLPH FRQVWUDLQHG WUHDWPHQW PRGHO

(YLGHQFH VKRZV WKDW VKDUHG PHGLFDO DSSRLQWPHQWV 60\$V DUH HIIHFWL  
RXWFRPHV DQG DUH ZHOO UHFHLYHG E\ SDWLHQWV 5HVHDUFK VVXGLHV WKDW F  
SDQHOV DQG OLPLWHG DFFHVV KDYH QHFHVVLWDWHG WKH FUHDWLRQ RI LQQRYD  
GLVRUGHUV 68'V DUH FKURQLF GLVHDVHV FRPSDUDEOH WR GLDEHWHV DQG K\SH  
\*URXS WKHUDS\ LV ZHOO HVWDEOLVKHG DV DQ HIIHFWLH YHLGHQFH EDVHG WUH  
HOHPHQWV RI JURXS WKHUDS\ WR SURYLGH 2%27 DOORZV SK\VLFLDQV WR VSHQG  
JURXS VHWLQJ

60\$ IRU 2%27 ZLOO DOORZ WKHVH SK\VLFLDQV PRUH WLPH ZLWK KLJK ULVN SDW  
WKHUDS\ 60\$V FDQ SURYLGH TXDOLW\ DQG FRVW HIIHFWLH WUHDWPHQW 7KLV  
VFRSH RI WKH FXUUHQW RSLRLG SUREOHP FXUUHQW WUHDWPHQW SUDFWLFHV DQ  
KRZ WR LPSOPHPHQW 60\$ PRGHO LQ DQ LQWHJUDWHG FDUH VHWLQJ

?YmkcfXg. 2SLRLG WUHDWPHQW 6XEVWDQFH XVH GLVRUGHU  
&DUGLRYDVFXODU GLVHDVH 3ULPDU\ FDUH

, QWURGXFWLRQ

3DWLW\QMMW\WLRP DQ\ FKURQLF GLVHDVH DUH DW JUHDWHU ULVN RI  
SRRU KHDOWK RXWFRPHV DQG TXDOLW\ RI OLIH DQG LQFUHDVHG FRVWV RI FDUH  
&KURQLF LOOQHVHV VXFK DV FDUGLRYDVFXODU GLVHDVH GLDEHWHV DQG  
SXOPRQDU\ GLVHDVHV DFFRXQW IRU RI GHDWKV HDFK \HDU DQG WKHVH  
KDYH EHHQ HVWLPDWHG WR DFFRXQW IRU PRUH WKDQ RI WKH KHDOWK FDUH  
FRVWV LQ WKH 8QLWHG 6WDWHV > @ \$ PXOWLWXGH RI DSSURDFKHV DQG  
WUHDWPHQW PRGDOLWLHV KDYH EHHQ LPSOPHPHQW HG WR GHFUHDVH  
KRVSLWDOL]DWLRQV DQG FRPSOLF DWLRQV RI SDWLHQWV ZLWH HV &KDG(TWHV @

60\$V WR WKH GLUHFW FDUH RI K\SHUWHQVLRQ VwxGLHV KDYH VKRZQ WKDW WKD LPSOHPHQWDWLRQ RI 60\$V FDQ LPSURYH PHGLFDWLRQ FRPSOLDQFH DQG JRDOV VHHWLQJ DFWLYLW\ LPSURYLQJ DGKHUHQFH WR WUHDWPHQW DQG GHFUHDLQJ ULVN RI FDUGLRYDVFVXODU FRPSOLF DWLRQV FRPSDUHG WR VWDQGD FDUH > @

## 1HXURPXFVXODU GLVRUGHU

1HXURPXFVXODU GLVRUGHUV DUH SURJUHVVLYH FRPSOH[ GLVHDVHV IRU D FXUUHQW DEVHQFH RI FXUH UHTXLULQJ DGMXVWPHQW RI PDQDJHPHQW DQG WUHDWPHQW PLQ RXWSDWLHQW SULPDU\ FDUH YLVLW OHDYHV OLWWOH WLPH WR DGGUHVV WKH SDWLHQW V SV\FKRVRFLDO DQG HGXF D QHHGV\ X@H RI 60\$V KDV ECHOPH\ VLVQLGLW\ HGXDOV ZLWK FRJQLWLH G\VIXQFWLRQ UHODWHG WR QHXURPXFVXODU GLVRUGHUV LQ ER VHOI HYDFOO\ UHVRXUFHV XW\WEMWLXGLRQ SURY@GH HYLGHQFH WKDW 60\$V FDQ LPSURYH WKH TXDOLW\ RI OLIH RI SDWLHQWV ZLWK QHXURPXFVXODU GLVRUGHUV > @

## 6XUJLFDO SURFHGXUHV

60\$V KDYH EHHQ XVHG DV D IROORZ XS LQWHUYHQWLQRQ IRU SDWLHQWV UHFRYHULQJ IURP VXUJLFDO SURFHGXUHV IRU SDWLHQW VDWLVIDFWLRQ UDWH KLJKHU FRPSDUHG WR VWDQGDUG FDUH DSSRLQWPHQWV > @ ,Q WKHVH VwxGLHV 60\$V ZHUH VKRZQ WR KDYH D UROH LQ WKH FDUH RI VXUJLFDO SRSXOD\WLRQD JF VVW H\W\W\Y\PRGHO WKDW LQFUHDVHG HGXF DWLRQ DQG VXSSRUW IRU ERWK SDWLHQWV DQG WKHLU IDPLO\ PHPEHUV > @

&XUUHQW WUHDWPHQW DQG EDUULHUV WR WUHDWPHQW IRU 28'V

+LVWRULFDOO\ WKH WUHDWPHQW RI 68'V LQ JHQHUDO KDV WHQGHG WR EH IUDJPHQWHG ZLWK SV\FKRORJLFDO DQG SV\FKRVRFLDO LQWHUYHQWLQRQV WDNLQ SODFH VHSDUDWHO\ IURP DQ\ PHGLFDWLQRQ DVVLVWHG WUHDWPHQW EHLQJ SURYLGHG PHWKDGRQH PDLQWHQDQFH EHLQJ D QRWDEOH H[FHSWLRQ :LWK WKH UHFHQW LQFUHDVH LQ EXSUHQRUSKLQH SUHVFULQJ WKH SDVW VHYHUDO \HD KDYH VM\KQ\O ZKLFK SK\VLFLDR\YFHD\UHDV\SHGLQYLGQJ EXSUHQRUSKLQH WUHDWPHQW ,QWLDOO\ PRVW SURYLGHUV RI EXSUHQRUSKLQZ ZHUH SV\FKLDWULVVW EXW \PRKLUW\DU\H\W\GDWD VXJJHVW D SV\FKLDWULVVW WRZDUGV SULPDU\ FDUH SK\VLFLDQV 3&3V ZLWK WKH SUHVFULQJ RI EXSUHQRUSKLQH E\ SURYLGHUV ZLWK DSSURSULDWH WUDLQLQJ LQFUH\WJQQLJ\FRDQ\W\WOKH ODVW GHFDGH > @ +RZHYHU HYHQ ZLWK WKH PDUNHG LQFUHDVH LQ WUDLQLQJ DQG WUHDWPHQW RI 28'V E\ 3&3V VwxGLHV KDYH VKRZQ WKDW PXOWLSOH IDFWRUV DUH GLVFRXUDJLQJ 3&3V IURP SUHVFB\Y\W\QJ\EX\B\G\HQRUSKLQH

:KLOH VHYHUDO PRGHOU RI 2%27 H[LVW WKH PRVW URXWLQHO\ XVHG PRGHOU FRQVLVW RI ORZ IUHTXHQF\ GLUHFW SK\VLFLDQ FRQWDFW DQG KLJK IUHTXHQF\ XVH RI DQFOODU\ VHUYLHV LQFOXGLQJ VHOI KHOS DQG SHHU OHG JURXSV DQG RWKHU QRQ VSHFLDOW\ EDVHG WUHDWPHQWV > @ ORVW VwxGLHV H[FQXGH 28'GSH\W\QK\W\VK ULVN WKRHV XQDEOH WR PDLQWDLQ DEVWLD\W\HSHDWHG DWWHPSWV PXOWLSOH VXEVWDQFH RI DEXVH PHQWDO KHDKW FRPRUELGLWLHV XQLQVXUHG DQG KRPHOHVV ZKLFK SUHVHQW DV\W\JQL\GD\QWLW\WLRQ WR JHQH\W\Q\I\Q\W\ > @ 2WKHU OLPLWDWLRQV WR SURYLGHUV EHLQJ ZLOOLQJ WR WUHDW 28' SDWLHQWV ZDV WIHDU RI SDWLHQW QHHGLQHV KLJK FRVW DQG WLPH FRQVWUDLQWV QDPHO FKDOOHQJHV DVVRFLDWHG ZLWK WKH IUHTXHQF\ RI QHHGHG YLVLWV HVSHFLDO HDUO\ LQ WKH WUHDWPHQW > @

'DWD RQ WKH FXUUHQW QXPHEHU RI SHRSOH EHLQJ WUHDWHG LQ RWKHU VHWLQJV ZLWK EXSUHQRUSKLQH IRU 28'V LV QRW NQRZQ 6\$0+6\$dV



5LOH\ 6% 0DUVKDOO (6 \*URXS YLVLWV LQ GLDEHW HV FDUH \$ V\VWHPDWLF  
UHYLHZ 'LDEHW HV (GXF \*XWKULH \*( %RJXH 5- ,PSDFW RI D VKDUHG PHGLFDO DSSRLQWPHQW  
OLIHVV\OH LQWHUYHQWL RQ RQ ZHLJKW DQG OLSLG SDUDPHWHUV LQ LQGLYLGXDOV ZLW  
7\SH GLDEHW HV \$ FOLQLFDO SLORW - \$P &ROO 1XWU  
6FKXPDQQ . &DSVXOH FRPPHQWDU\ RQ (GHOPDQ HW DO VKDUHG  
PHGLFDO DSSRLQWPHQWV IRU SDWLHQWV ZLWK GLDEHW HV PHOOLWXV \$ V\VWHPDWLF  
UHYLHZ - \*HQ ,QWHUQ OHG &RKHQ /% 7DYHLUD 7+ .KDWDQD 6\$0 'RROH\ \$\* 3LUUDJOLD 3\$ HW DO  
3KDUPDFLVW OHG VKDUHG PHGLFDO DSSRLQWPHQWV IRU PXOWLSOH  
FDUGLRYDVFXODU ULVN UHGXFWL RQ LQ SDWLHQWV ZLWK W\SH GLDEHW HV 'LDEHW HV  
(GXF 1ZDQNZR 7 <RRQ 66 %XUW 9 \*X 4 +\SHUWHQVLRQ DPRQJ DGXOWV LQ  
WKH 8QLWHG 6WDWHV 1DWLRQDO KH DOWK DQG QXWULWLRQ H[DPLQDWLRQ VXUYH\  
1&+6 'DWD %ULHI SS 'LFNP DQ3LQW] & \*ROG . LYODKDQ & %HKDYL RU FKDQJHV LQ  
SDWLHQWV ZLWK GLDEHW HV [SDHQGLH HQ ISHQJW HV QDILRQG  
PHGLFDO DSSRLQWPHQWV - \$P \$FDG 1XUVH 3UDFW  
:DWWV 6\$ \*HH - 2d'D\ 0( 1XUVH SUDFWLWL RQHU OHG  
:D €€ÀÙD 1= à ò†ð 0 . Q

5LFKHUWKQVRQ % /RQJ WHUP VHOI WUH+DRPIPH QWRZYLWGIKUHVdWFKDLCORLOFHD ORWXSSRUW V\VV  
EXSUHQRUSKLQH DV D UHVSRRQVH WR EDUULHUVWR \$RPLG VXEYVWVXWLRLQ WU\$DUWBDQ  
H FDVH RI 6ZHGHQ +DUP 5HGXFH -  
6X]XNL - (OOLVRQ 79 & RQQHU\ +6 6XUEHU & 5HQQHU -\$ 7UDLQLQJ  
LQ EXSUHQRURS\KFLHQ\IE DRDSELQ\ LG WUHDWPHQW \$ VXUYH\ RI  
SV\FKLDWU\ UHVLGHQF\ WUDLQLQJ SURJUDPV \$FDG 3V\FKLDWU\ - \$P \$VVRF 'LU  
3V\FKLDWU 5HVLG 7UDLQ \$VVRF \$FDG 3V\FKLDWU\