# ! " #\$%&\$#' () \*+\$, -\*+(\$.../ O\$! )-12-\*\$3) (\$! " #

! "##\$%" ('\$%) #\*+, -##\$%"\$%) . /0+1\$%2'\$%2-34-33%5'\$%2/-3#06%53"78-, 7-, \$%9'\$% 201: -3\$%, '<'\$%=0, 1/6\*-\$%>'\$%9", ?@A+4, -3\$%) @; '\$%, 088/, \$%4'\$% &+:, B@>/BC?\$%5'\$%5D77#-3\$%E'\$%F/G3+B"#/. +\$%5'\$%HI+, G/, +3/\$%9'\$% J: /6+7\$%K'\$%L+B@<+3, -"3/\$%) '\$%A+38-, \*-34\$%K'\$%+, G%5+, +. /7\$%F'!

## O456(-76

>-+#%M/3#G%-. "G-, 1-%N>A OP%: +7%\*--, %8/08-G%+7%+%3-6-GC%0/3% 1033-, 8%6+3?-8%+11-77%'770-7\$%0+1"#"8+8", 4%R0"1?-3%+I I 3/. +#7%+, G% ", 13-+7-G%/GG7%/0%2-"6\*037-6-, 8%+8%+%4//G%I 3"1-'%E8%7%8: -3-0/3-% +, %+883+18". -%+. -, 0-%0/3%I 0370"8%0/3%6+, 00+1803-37%8/G+C\*%J: "7% I +I -3\$%8: -%8: "3G%', %+%7-3"-7#//?", 4%+8%8: -%07-%/0%>A 0%', %003/I -\$% /08#", -7%8: -%6"71077"/, 7%: -#G%\*-8M--, %?-C%/I", "/, %#-+G-37% ", %I 3"1", 4%+, G%3-"6\*037-6-, 8%+13/77%+%, 06\*-3%/0%003/I -+, % 1/0, 83"-7%+8%+%3/0, G8+\*#-@78C#-%6--8", 4'%J: -%+"6%/0%: -%6--8", 4%

# 9)&6+&65

O456(-76\$:;
9)&6+&65\$
<-7=>()'&1:?
H-18"/,%UT%VII/380,"8"-7%2/3%>A0%"W
66"77"/, ", 4₩, G%) 11-77%''''W</td
<#", "1+#%D. "G-, 1-%"
F+8"-, 87‰, G‰081/6-7%
H-18"/, %ZT%=#/I", 4%+%J: 3@C-+3%E6I#-6-, 8+8"/, %>/+G6+I%'''''''''Y
H-18"/, %ST%) 18"/, %F#+, , ", 4%
) 18"#C%-, 4+4-%', %+3#C%G"+#/40-%M"8: %I+C-37%/, % >A 0%,G7%''''
, 7-, 707%-\-31"7-%/, % A=]0%, %1#", "1+#%G-1"7"/, 7%'''''''''U^
%"""UU
=#/I%+%6/G-#%+II3/+1:%0/3%8:-%1/##-18"/,%/0% F>V%G+8+%
, 1#07"/, 7%</td
>-Q-3-, 1-7%
)1?,/M#-G4-6-,87% US
%" US



# <-7=>()'&1

J: -%7 - %'0% - +#%1/3#G% . "G-, 1-% > A OP%M: "1: %7%G-3". -G%3/6%, +#C7"7%/3%C, 8: -7"7% /0%3 - +#%1/3#G%G+8+%N > A = P%/\*8+", -G%03/6%7/031-7%701: %+7%1+8"-, 8%3-4"783"-7% -#-183/, "1%6-G"1+#%2-1/3G7%, G%1#+"67%G+8+\*+7-7%77%, 13-+7", 4#C%3-1/4, "7-G%+7%+% . +#0+\*#-%7/031-%/0%", 0/36+8"/, <math>%/3%6+3?-8%+11-77%, G%3-"6\*037-6-,  $8\%NK+?+GC\% et al., %Z^UYP'\%A: "#78%8: -3-%+3-%G"713-1+, 1"-7%*-8M--, %; J) %*/G"-7%+, G%8: -"3% M"##", 4, -77%8/%07-%>A O%", %+, C%G-1"7"/, @6+?", 4%8: -%0_, -8; J) %&/", 8%) 18"/, %S% I 3/`-18%0/107-7\%/, %-. "G-, 1-%4-, -3+8"/, %', %A/3?%F+1?+4-%W%N ("0-1C1#-%+1I3/+1: % 8/%6I3/. -%-. "G-, 1-%4-, -3+8"/, P'MJ: "7%M/3?%I +1?+4-%+"67%8/%4-, -3+8-%8: -%3"4: 8% = 0.5 m = 0.5 m$ 



J: "7%2-I/38\$%8: -%8: "3G%, %+%7-3"-7%G"71077", 4%8: -%D7-%/0%>-+#%A/3#G%D. "G-, 1-%I>AOP% ", %D03/I -\$%G/106-, 87%G"71077"/, 7%M"8: %% 06 \* -3%/0%8+?-: /#G-37%-8%-%2/0, G@8+\*#-% 78C#-%6--8", 4%+, G%Q/##/M7%/, %Q3/6%8M/%I 3-. "/07%6--8", 47%N+, G%+11/6I+, C", 4% 3-I/387P%: -#G%', %Z^UX%+, G%Z^UY'%J: -7-%G"71077"/, %7-77"/, 7%M-3-%: -#G%Q/##/M", 4% +%Z^UW%ePayer RWE voice of the customer projectf%M: "1: %4+", -G%', 7"4: 8%, 8/%>AO% , --G7%+, G%I 3"/3"8"-7%+13/77%. +3"/07%O\_%1/0, 83"-7'%) 7%+%G"3-18%3-70#8%+%7-3"-7%/0%

1#", "1+#%71-1"+#8"-7%+, G%1/66"77"/, ", 4%/0%1+3-\$%+7%M-##%+7%13"/3%-\1-3"-, 1-%', %8: -%

8/%7/6-%-\8-,8%",%+##%OO3/I-+,%1/O,83"-7%3-I3-7-,8-G\$%4-,-3+##C%",%8:-%+3-+7%/0% +11-#-3+8-G%11-77%,G%2-@3-."-M'%H8+?-:/#G-37%+#O-G%87%/,83"\*O8"/,%8/%G-1"7"/,@ 6+?",4%",%1/6\*",+8"/,%M"8:%83+G"8"/,+#%><J%G+8+\$%I+38"10#+3#C%",%8:-%1:3/,"1% 1/,G"8"/,%3-,+\$%M:-3-%8"6-%+?-,%8/%4+8:-3%/081/6-7%-."G-,1-%7%,13-+7",4%GO-%

G-.-#/I6-,8%0/3%8:-%76+##%I+8"-,8%I/I0#+8"/,7\$%G-#+C-G%3-130"86-,8%8/%><J%"7% \*-1/6",4%6/3-%/0%+,%770-%I!"##%&#)!'



8: -3-%'7%, /%>AO%+. +"#+\*#-%Q/3%', 1/31/3+8"/, %', 8/%G-1"7"/, @6+?", 4'%=-71"8-%8: "7\$% I +38"1"I +, 87%M-3-%\*#-%8/%G-, 8"0C%% 06\*-3%/0%"80+8"/, 7%-#+8-G%8/%1/66"77"/, ", 4% +, G%6-G"1", -%11-77%M: -3-%8: -C%8: /04: 8%8: -3-%M-3-%/II/380, "8"-7%2/3%>AO'

>AO%1/O#G%\*-%O7-G%+7%+%8//#%8/%", 13-+7-%O, G-378+, G", 4%/0%8: -%O7-%/0%G3O47%", % I 3+18"1-\$%\*C%1/##-18", 4%G+8+%/, %G3O4%O7+4-\$%V1: "1: %6+C%4O"G-%83-+86-, 8%G-1"7"/, 7% +, G%-, : +, 1-%+11-77%', %1-38+", %I +8"-, 8%43/OI 7'%H/%1+##-G%0\*"4%G+8+c%1/O#G%\*-%O7-G% 8/%'G-, 8"0C%8: -%'6I +18%/, %7/1"-8C%/0%+%1/, G"8"/, %7O1: %+7%) #B: -"6-3c7%/3%G-6-, 8"+% ", %8-367%/0%', G"3-18%1/787%+, G%G"3-18%RO+#"8C%/0%#"0-%h/(P%6I +18%2/3%\*/8: %I +8"-, 87%

+71-38+", %8: -%61+18%8: +8%1+3-%1+, %13/. "G-"

O7-QO#'%E8%M\"##%\*-%. "8+#%8/%-, 7O3-%8: +8\$%"Q%F: +7-%EE%G+8+%"7%O7-G%8/%4+", %6+3?-8", 4% +O8: /3"7+8"/, \$%+, C%78OG"-7%+3-%G-7"4, -G%8/%-, 7O3-%8: +8%G+8+%1/##-18"/, %1/, 8", O-7%



G/6+", '%9038: -36/3-\$%'G-, 8"0C", 4%+, G%\*0"#G", 4%3-#-.+, 8%, -8M/3?7%+, G%+##"+, 1-7% +7%M-##%+7%+11-#-3+8", 4%8: -%G-.-#/16-, 8%+, G%1/61#-8"/, %/0%6/G-#%", "8"+8".-7%

N) EP\$%+, G%7: +I ", 4%3-#-. +, 8%O\_, -8; J) %783-+67%0/3%/, 4/", 4%G+8+%1/##-18"/, %M"##% 78OGC%I 3/43+66-P\$%7I/, 7/3", 4%+, %', 8-43+8-G%-. "G-, 1-%+II3/+1: %0/3%3+3-%G"7-+7-%

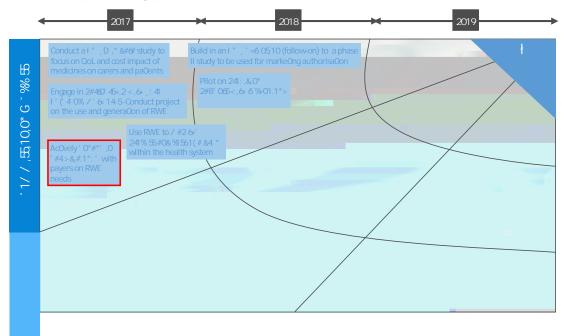


## H-18"/, %ST%) 18"/, %F#+, , ", 4

9/##/M", 4% 8: -% G-. -#/1 6-, 8% /0% 8: -% 8: 3--@C-+3% "61#-6-, 8+8"/, % 3/+G% 6+1% I +38"1"I +, 87%M-3-%+7?-G%8/%. /8-%/, %M: +8%8: -C%8: /04: 8%M-3-%8: -%8/1 %8M/%+3-+7%

1/O, 87%M: "#78%8: -"3%7-1/, G%M+7%M/38: %/, -%1/O, 8'%E, "8"+8". -7%M"8: %8: -%6/78% /8-7% N9"4O3-%ZP%M-3-%8: -, %1 O37O-G%', %8: -%+18"/, %1 #+, , ", 4%78+4-'

Figure 2: 24 refined RWE initiatives highlighting those achieving most votes for action planning pursuit



3-1-".", 4%B-3/\$%/, -\$%8M/%/3%8: 3--%. /8-7P'%J: -7-%8/I %0/O3%", "8"+8". -7%M-3-%8: -, % G"71077-G%", %0O38: -3%G-8+"#%", %/3G-3%8/%+71-38+", %8: -%?-C%78+?-: /#G-37%', ./#. -G\$%

#### Actively engage in early dialogue with payers on RWE needs

J: -%", "8"+#%I 3"/3"8C%+18"/, %I /", 8%"7%8/%+18". -#C%-, 4+4-%", %+, %-+3#C%G"+#/40-%M"8: % I+C-37%/, %>A0%, --G7%MV"8: %8: -%+"6%\*-", 4%8/%G-. -#/I %\*-88-3%-. "G-, 1-%I +1?+4-7%

 $\begin{array}{l} $"7\%8/\%3-."-M\%8:-\%-\1-3"-,1-\%/0\%8:-\%07-\%/0\%>A=]>AO\%',\%+8"/,7\%1/,7"G-3-G\%+3\#C\% \\ G-1"7"/,\%6+?-37\%701:\%+7\%8:-\%_,"8-G\%5",4G/6\%+,G\%93+,1-\%."+\%*/8:\%',8-3,+\#\%+,G\% \\ $-\8-3,+\#\%3-."-M'\%9/\#/M",4\%8:"7\%3-."-M\%'7\%8:-\%G-.-#/16-,8\%/0\%7-1+3+8-\%/3\%/",8\% \\ I 3/1-77-7\%I+7\%II #"1+*#-P\%M'8:\%8:-\%OK)\%/3\%O_,-8;J) "\%J:-\%-\8\%788-I\%7\%8/\%-\1+,G\% \\ \end{array}$ 



\*-%-R0"3-G%/%, 703-%: +8%, C%>A0%7%07-G%, %: -%/33-18%6+, , -3%5-C%6"#-78/, -7% I +8: M+C7%N0/3% \+6I#-\$%2/3%"/7"6"#+37P\$%7"4, ", 4%/00%/, %2-R0"3-G%6-8: /G/#/4C%+, G%

#### Developing a definition of PRO

6+C#+C%2: -%2/0, G+8"/, 7%2/3%-61/M-3", 4%1+8"-, 87%2/%-, 4+4-%6/3-%+18". -#C%', %2: -% 07-%/0%>A0\$%-, +\*#", 4%2: -6%2/%", 13-+7-%2: -"3%0, G-378+, G", 4%/0%"87%"61/38+, 1-\$% 6+?", 4%2: -6%6/3-#"?-#C%2/%7011/38%2: -%07-%/0%2: -"3%G+8+'%E, "8"+#%+18"/, 7%', 1#0G-%

/0%?-C%/I", "/, %#-+G-37\$%+1+G-6"+\$%I+8"-, 87%+, G%8: -"3%+G./1+8-7%+, G%", GO783C%

78+?-: /#G-37%, 1#OG", 4%#", "1"+, 7\$% +8"-, 87\$% +C-37\$% -4O#+8/3C%, G% J) % /G"-7%, G% ", GO783C% -C% "#-78/, -7%/3%: "7%+18"/, % /", 8%, 1#OG-%: -%G-. -#/16-, 8% 0% % 03. -C%

#### Develop a model approach for the collection of PRO data

 $\begin{array}{l} \mathsf{G}_{-.-\#/1\ \%+,\ \%+1\ 1\ 3/+1:\ \%:\ +8\%1+,\ \%^*-\%07-G\%8/\%07-00} \# \mathbb{C}\%1/\#-18\%F>\mathbb{V}\%G+8+'\%E,\ "8"+\#\%78-1\ 7\%:\ -3-\%:\ 1\#0G-\%6+1\ 1",\ 4\%+\%1\ 3/1-77\%2/3\%G+8+\%1/\#-18"/,\ \%g\%"-'\%'G-,\ 8"0\mathbb{C}",\ 4\%1\mathbb{V}:\ -3-\%G+8+\%G/-7\%+,\ \mathsf{G}\%G/-7\%,\ /8\%-\ "78\%+77-77",\ 4\%8:\ -\%\mathbb{R}\mathbb{O}+\#"8\mathbb{C}\%/0\%G+8+\%3-\mathbb{R}\mathbb{O}"3-\mathbb{G}\%2/3\%+,\ \mathbb{C}\%G-1"7"/,\ \%g\%+77-77",\ 4\%2:\ -\%\mathbb{R}\mathbb{O}+\#"8\mathbb{C}\%/0\%G+8+\%3-\mathbb{R}\mathbb{O}"3-\mathbb{G}\%2/3\%+,\ \mathbb{C}\%G-1"7"/,\ \%g\%+77-77",\ 4\%2:\ -\%\mathbb{R}\mathbb{O}+\#"8\mathbb{C}\%/0\%G+8+\%3-\mathbb{R}\mathbb{O}"3-\mathbb{G}\%2/3\%+,\ \mathbb{C}\%G-1"7"/,\ \%g\%+77-77",\ 4\%2:\ -\%\mathbb{C}\%2/3\%+70-7\%-7\%-7\%+70.$ 

I 3/1-77%1/, 7"G-3", 4%G+8+%#+M7%+, G%+, C%1/6I#"+, 1-%"770-7\$%+, G%"G-, 8"0C", 4%+, C% ", 03+78301803-]8-1:, /#/4C% --G7'%J: -7-%18"/, %I /", 87%M"##% -%#-G%"C%, G0783C%M"8: % 60#8"I#-%78+?-: /#G-37%', 1#0G", 4%I +8"-, 87\$%1#", "1"+, 7%+, G%3-40#+8/3C%\*/G"-7'%=+8+% 4+8: -3", 4%2-R0"3-6-, 87%6 "33/3%: /7-%', %2: -%+18"/, %I /", 8%\*/.-'%J: -%G-.-#/I 6-, 8%

G-.-#/I6-,8%/0%+,%-\I-38%,-8M/3?%+,G%2/0,G%8+\*#-7%M"##%-,+\*#-%8:-%+77-776-,8%

. +#"G+8-G% 3/1-77%, G%% /G-#% #+C\*//?'



# </, 1#07"/, 7

 $\begin{array}{l} J: "7\%3 - I / 38\%G / 106 - , 87\%8: -\%G"71077" / , 7\%: -\#G\%+8\%+\%3 / 0, G8 + *#-@78C#-\%6 - -8", 4\%M"8: \% \\ +\%, 06 * -3\%/0\%78 + ?-: /#G - 37'\%J: "7\%7\%8: -\%E: "3G\%G"71077" / , \% - 77" / , \% , \%: "7\% - 3" - 7\%M"8: \% \\ I 3 - . "/07\%7 - 77" / , 7\%G - . -#/I " , 4\%/03\%0 , G - 378 + , G" , 4\%/0\%8: -\%3 / # -\%/0\%> A 0\% + 13/77\%8: -% \\ 0_'\%J: -\% + "6\%/0\%E: "7\%7 - 77" / , \%M + 7\%8 / \% + 77"78\%> / 1: -\%R/\%G - . -#/I \% + \% / + G6 + I \%/3\% + 18" / , \% \\ 8/\% - , : + , 1 - \%E: -\%07 - \%/0\%3 - +#\%M / 3#G\% - . "G - , 1 - \%0/3\%" 6 I 3 / . -G\%6 + 3? - 8\% + 11 - 77\%0 / 3\% + ##\% \\ I : +36 + 1 - 08"1 + #\%6 + , 00 + 1803 - 37' \\ \end{array}$ 

6/G-#%+II3/+1: %0/3%8: -%1/##-18"/, %/0%8: "7%G+8+%+3-%7--, %+7%8: -%6/78%"6I-3+8". -% 78-I7%2/3%-, : +, 1", 4%8: -%2/#-%/0%>AO%20%20%20%27-%7%2/%\*-1/6-%6/3-%1/66/, %8: -, %

#### >-0-3-, 1-7

O\_, -8; J) %NZ^UXP%O\_, -8; J) %&/", 8%) 18"/, %S%NZ^UX%g%Z^Z^P%A/3?%F+1?+4-%W%g% ("Q-%1C1#-%+1 I 3/+1: %8/%'6 I 3/. -%O. "G-, 1-%! -, -3+8"/, '%) . +"#+\*#-%+8T%: 88I T]]MMM' -O, -8: 8+'-O]+18". "8"-7]-O, -8: 8+@/", 8@+18"/, @S@Z^UX@Z^]M/3?@I +1?+4-@W@#"Q-@ 1C1#-@+I I 3/+1: @'6 I 3/. -@-. "G-, 1-@4-, -3

003/I -+, % </66"77"/, % NZ^UWP% 003/I -+, % >-Q-3-, 1-% d-8M/3?7I% A/3?", 4% Q/3% I +8"-, 87%/N"8: %3+3-\$%#/M@I 3-. +#-, 1-%+, G%1/6I #-\%G"7-+7-7'%). +"#+\*#-%+81%: 88I 7I]]

! "##% (\$%) . /O+1%2\$%=0, 1/6\*-%>\$% 088/, %\$%+:, B@>/BC?%5\$%H1:3+66%A\$%H1+, G/, +3/% 9%J:/6+7%K%+, G%5+, +. /7%F! %NZ^UXP%J:-%07-%/0%>-+#%A/3#G%0."G-, 1-%", %8:-% 003/I-+, %1/, 8-\8T\$), %+, +#C7"7%/0%?-C%-\I-38%/I", "/, '%).+"#+\*#-%+8T% 88IT]]G\'G/"'

 $\begin{array}{l} ! " \# \% (\$ ) \# * +, - \# \% \$ ) = +, ? \% < \$ = 0, 1/6 * - \$ > \$ ? \% ", ? @A + 4, -3 ) @; \$ & 088 /, \% \% & +: , B @> / BC ? \% \\ 5 \% 5 D77 \# - 3 \% \% / G3 + B " \# /. + \% 5 \% H1 : 3 + 6 6 \% A \$ H1 +, G /, +3 / \% \% ] : / 6 + 7 \% < \$ L + B & +3, - "3 / \% \% \\ A + 38 -, * - 34 \% / \% +, G \% 5 +, +. / 7 \% ! \% Z ^ U Y P \gg A 0 \% , \% 003 / I - \% F + I - 3 \% E T \% J : - \% 0 7 - \% / \% > - + \# \% A / 3 \# G \% . "G -, 1 - \% , \% : - \% G " 7 - + 7 - \% / , 8 - \8: $) . + " \# + * # - \% 8 T $ : 88 I T ] G \'G / "' / 34 ] U ^ ' Z U [ W S ] \\ (HO' > V' Y Y ^ S Y \\ \end{array}$ 



&-3, \*-34‰)‰ 88-\*3", 4%<9‰ +6\*3+-07‰5‰#)! '‰Z^U^P‰J: -‰HM-G"7: ‰A-\*@7C78-6%2/3% 0, : +, 1-6-, 8‰, G‰=-. -#/I6-, 8‰0‰. "G-, 1-@\*+7-G%+3-%, % -+38‰"7-+7-‰. +#0+8-G% ) 11/3G", 4‰/‰-1/66-, G-G‰J: -3+I "-7‰HA0=0; 0) >JP‰&!, #%GBIUXUY@UXZU'

K+?+GC%) \$\#18-4-, 4+% \$\% "+4#"+%) \$\#=-\*3+C\%JF) \$\%(--7\%K \$\% +II "1: %K\$\%>C##%2\$\% \*3+67\%5 \$\% J: M+"8-7\> \$\% +3, -3\#\\$\%/, 77/, %F\% /-8871: \\A \%/, \%\*-: +#\%/0\% -8>-+#\\A/3?\%F+1?+4-7\%

</61+3+8". -%000-18". -, -77%>-7-+31: 1% (-+3, ", 47%03/6%EKE@! -8>-+#%Journal of Comparative Effectiveness Research

#### Acknowledgements

J: -%+08: /37%//0#G#"?-%/%+1?, /M#-G4-%% /QQ6+, @(+%>/1: -%) ! %/3%7011/38%/Q% 8: "7%/3/`-18'

#### Author affiliations

