**Additional File 4:** Non-manual specified BCTs delivered in behavioural support sessions, presented according to session type and ranked according to frequency of transcripts featured in.

BCT label	Number of transcripts featured in (% of total)
Pre-quit transcripts (max 8)	
'provide feedback on progress and performance'	8 (100%)
'provide normative information on other's experiences'	8 (100%)
'provide options for additional/later support'	8 (100%)
'build rapport'	8 (100%)
'general practitioner communication approaches'	8 (100%)
'provide reassurance'	8 (100%)
'explain how nicotine dependence develops'	7 (87.5%)
'boost motivation and self-efficacy'	6 (75%)
'emphasise choice'	6 (75%)
'provide information on the consequences of smoking and	5 (62.5%)
smoking cessation' 'barrier identification and problem solving'	5 (62.5%)
'reflective listening'	5 (62.5%)
'goal setting'	4 (50.0%)
'Advise on conserving mental resources'	4 (50.0%)
Ask about current stop smoking medications the smoker is	4 (50.0%)
using'	1 (30.0%)
'strengthen ex-smoker identity'	3 (37.5%)
'advise on avoidance of cues for smoking'	3 (37.5%)
'explain expectations regarding the treatment programme'	3 (37.5%)
'provide rewards contingent on effort or progress'	2 (25.0%)
'advise on changing routine'	2 (25.0%)
'tailor interactions appropriately'	2 (25.0%)
'offer/direct towards appropriate written materials'	2 (25.0%)
'prompt behavioural substitution'	2 (25.0%)
'distract from motivation to engage in behaviour'	1 (12.5%)
'facilitate restructuring of social life'	1 (12.5%)
'facilitate relapse prevention and coping'	1 (12.5%)
Quit-day transcripts (max 4)	
provide feedback on progress and performance'	4 (100%)
provide recuback on progress and performance provide normative information on other's experiences'	4 (100%)
'emphasise choice'	4 (100%)
'provide information on the consequences of smoking and	3 (75%)
smoking cessation'	3 (1370)
'advise on changing routine'	3 (75%)
'explain how nicotine dependence develops'	3 (75%)
'reflective listening'	3 (75%)
'provide rewards contingent on effort or progress'	2 (50%)
'goal setting'	2 (50%)
'prompt review of set goals'	2 (50%)
'explain expectations regarding the treatment programme'	2 (50%)
'boost motivation and self-efficacy'	2 (50%)
'create or reinforce negative associations'	2 (50%)
'barrier identification and problem solving'	2 (50%)
	2 (50%)
provide options for additional/later subbort	= \~ · · · /
'provide options for additional/later support' 'build rapport'	2 (50%)
'build rapport'  'general practitioner communication approaches'	2 (50%) 2 (50%)

'provide information on withdrawal symptoms'	2 (50%)
'advise on use of social support'	1 (25%)
'advise on avoidance of cues for smoking'	1 (25%)
'advise on conserving mental resources'	1 (25%)
'advise on environmental restructuring'	1 (25%)
'prompt self-recording'	1 (25%)
'action planning/develop treatment plan'	1 (25%)
'help identify reasons for wanting/not wanting to stop	1 (25%)
smoking'	( /
'strengthen ex-smoker identity'	1 (25%)
'prompt self-reward'	1 (25%)
'facilitate restructuring of social life'	1 (25%)
'emphasise the importance of abrupt cessation'	1 (25%)
Post-quit transcripts (max = 22)	
'provide feedback on progress and performance'	22 (100%)
'information gathering and assessment'	22 (100%) 22 (100%
'boost motivation and self-efficacy'	20 (90.1%)
'provide normative information on other's experiences'	18 (90.0%)
'reflective listening'	16 (72.7%)
'general practitioner communication approaches'	15 (68.1%)
'provide reassurance'	15 (68.1%)
'strengthen ex-smoker identity'	14 (63.6%)
'barrier identification and problem solving'	14 (63.6%)
'explain how nicotine dependence develops'	13 (59.1%)
'provide information on withdrawal symptoms'	10 (45.5%)
'emphasise choice'	9 (40.1%)
'provide information on the consequences of smoking and	8 (36.4%)
smoking cessation'	0 (30.470)
'advise on changing routine'	7 (31.8%)
'build general rapport'	7 (31.8%)
'advise on conserving mental resources'	6 (27.3%)
'explain expectations regarding the treatment programme'	6 (27.3%)
'help identify reasons for wanting/not wanting to stop	6 (27.3%)
smoking'	,
'create or reinforce negative associations'	6 (27.3%)
'prompt behavioural substitution'	5 (22.7%)
'emphasise the importance of abrupt cessation'	4 (18.2%)
'distract from motivation to engage in behaviour'	4 (18.2%)
'action planning/develop treatment plan'	4 (18.2%)
'prompt self-reward'	4 (18.2%)
'ask about stop smoking medications the client is currently using'	4 (18.2%)
'advise on avoidance of smoking cues'	2 (9.09%)
'facilitate restructuring of social life'	2 (9.09%)
'prompt commitment from the client there and then'	2 (9.09%)
'advise on use of social support'	2 (9.09%)
'advise on environmental restructuring	1 (4.55%)
'prompt self-recording'	1 (4.55%)
'goal setting'	1 (4.55%)
'offer/direct towards appropriate written materials'	1 (4.55%)
'tailor interactions appropriately	1 (4.55%)
'advise on weight control'	1 (4.55%)
'set graded tasks'	1 (4.55%)