Supplementary Materials: Mining Branching Rules from Past Survey Data with an Illustration Using a Geriatric Assessment Survey for Older Adults with Cancer

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Question	Previous Answers	Presumed Answer
2	0	0
3	00	0
3	10	0
4	000	0
5	0000	0
5	1000	0
6	00000	0
8	0000000	0
8	1000000	0
9	00000000	0
9	1000000	0
10	10000000	0
*10	00000000	0

*Denotes the only additional CQ compared to Table 1

Table S2. Function Level	(Reverse Ordering) CQs to	o Eliminate (Budget is 1%).
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Question	Previous Answers	Presumed Answer
1	NA	0
3	01	1
4	001	1
4	011	1
5	0000	0
6	00000	0
6	00010	0
6	00110	0
8	0000000	0

Table S3. Functional Activities (Reverse Order) and their Mined Branching Rules (Budget is 1%); (0 = not limited or limited a little, 1 = limited a lot).

Activity		Rule 1		Rule 2		Rule 3		Rule 4		e 5	Rule 6		Rule 7	
Activity	0	0 1		1	0 1		0 1		0 1		0 1		0 1	
1. Bathing or dressing yourself														
2. Walking one block														
3. Walking several blocks														
4. Walking more than a mile														
5. Bending, knelling, or stopping														
6. Climbing one flight of stairs														
7. Climbing several flights of stairs														
8. Lifting or carrying groceries														
9. Moderate activities, such as moving														
a table, pushing a vacuum cleaner,														
bowling or golfing														
10. Vigorous activities, such as														
running, lifting heavy objects or														
participating in strenuous sports														

Question	Previous Answers	Presumed Answer
2	0	0
3	00	0
5	0000	0
5	1000	0
6	00000	0
6	10000	0
6	10010	0
7	000000	0
7	100000	0
8	0000000	0
8	1000000	0
8	1001001	0
9	00000000	0
10	000000000	0
10	10000000	0

Table S4. Function Level (Inside Out Ordering) CQs to Eliminate (Budget is 1%).

Table S5. Functional Activities (Inside Out Order) and their Mined Branching Rules (Budget is 1%), (0 = not limited or limited a little, 1 = limited a lot).

Activity		le 1	Rule 2		Rule 3		Rule 4		Rule 5		Ru	le 6
		1	0	1	0	1	0	1	0	1	0	1
1. Vigorous activities, such as running, lifting												
heavy objects or participating in strenuous sports												
2. Lifting or carrying groceries												
3. Climbing one flight of stairs												
4. Walking more than one mile												
5. Walking one block												
6. Bathing or dressing yourself												
7. Walking several blocks												
8. Bending, kneeling or stooping												
9. Climbing several flights of stairs												
10. Moderate activities, such as moving a table,												
pushing a vacuum cleaner, bowling or golfing												