

Supplementary Table S1: Respondents' characteristics

Characteristics	Descriptive analyses	Complete sample (n=1,373)	PwCP with DCS score \geq 37.5 (n=462)	PwCP with DCS score<37.5 (n=911)
Socio-demographic characteristics				
Age (years)	Mean	52.00	48.24	52.91
	SD	16.36	15.92	16.36
	Min	18.00	18.00	18.00
	Max	90.00	90.00	87.00
Sex	Male: n (%)	686 (49.97%)	218 (47.19%)	468 (51.37%)
	Female: n (%)	682 (49.67%)	241 (52.16%)	441 (48.41%)
	Intersex: n (%)	4 (0.29%)	2 (0.43%)	2 (0.22%)
	Prefer not to say: n (%)	1 (0.07%)	1 (0.22%)	0 (0.00%)
Gender	Man: n (%)	680 (49.53%)	218 (47.18%)	462 (50.71%)
	Woman: n (%)	671 (48.87%)	234 (50.65%)	437 (47.97%)
	Non-binary: n (%)	8 (0.58%)	3 (0.65%)	5 (0.55%)
	Transgender woman: n (%)	1 (0.07%)	1 (0.22%)	0 (0.00%)
	Transgender man: n (%)	2 (0.15%)	1 (0.22%)	1 (0.11%)
	Two-spirit: n (%)	3 (0.22%)	2 (0.43%)	1 (0.11%)
	Gender fluid: n (%)	3 (0.22%)	2 (0.43%)	1 (0.11%)
	Other: n (%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

	Prefer not to say: n (%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Missing data: n (%)	5 (0.36%)	1 (0.22%)	4 (0.44%)
Provinces	British Columbia: n (%)	220 (16.02%)	80 (17.32%)	140 (15.37%)
	Alberta: n (%)	188 (13.69%)	53 (11.47%)	135 (14.82%)
	Prairies: n (%)	103 (7.50%)	36 (7.79%)	67 (7.35%)
	Ontario: n (%)	487 (35.47%)	175 (37.88%)	312 (34.25%)
	Quebec: n (%)	273 (19.89%)	82 (17.75%)	191 (20.97%)
	Atlantic Canada: n (%)	102 (7.43%)	36 (7.79%)	66 (7.24%)
Geographical area	Rural: n (%)	162 (11.80%)	55 (11.90%)	107 (11.75%)
	Urban: n (%)	1211 (88.20%)	407 (88.10%)	804 (88.25%)
First learned language	French: n (%)	315 (22.94%)	98 (21.21%)	217 (23.82%)
	English: n (%)	931 (67.80%)	318 (68.83%)	613 (67.29%)
	An aboriginal language: n (%)	2 (0.15%)	2 (0.43%)	0 (0.00%)
	Spanish: n (%)	9 (0.66%)	5 (1.08%)	4 (0.44%)
	Mandarin: n (%)	15 (1.09%)	4 (0.87%)	11 (1.21%)
	Arabic: n (%)	9 (0.66%)	2 (0.43%)	7 (0.77%)
	Other: n (%)	92 (6.70%)	33 (7.14%)	59 (6.47%)
Education level	Less than a high school diploma: n (%)	30 (2.19%)	10 (2.16%)	20 (2.20%)
	High School diploma: n (%)	264 (19.23%)	89 (19.26%)	175 (19.21%)

	College, CEGEP or other non-university certificate or diploma: n (%)	405 (29.50%)	141 (30.52%)	264 (28.98%)
	University certificate: n (%)	135 (9.83%)	47 (10.17%)	88 (9.66%)
	Bachelor's degree: n (%)	351 (25.56%)	105 (22.73%)	246 (27.00%)
	Above the bachelor's level: n (%)	181 (13.18%)	67 (14.50%)	114 (12.51%)
	Prefer not to say: n (%)	7 (0.51%)	3 (0.65%)	4 (0.44%)
Cultural and ethnical backgrounds	Aboriginal: n (%)	74 (5.39%)	21 (4.55%)	53 (5.82%)
	North American: n (%)	626 (45.59%)	217 (46.97%)	409 (44.90%)
	European: n (%)	552 (40.20%)	172 (37.23%)	380 (41.71%)
	Caribbean: n (%)	20 (1.46%)	10 (2.16%)	10 (1.10%)
	Latin, south American: n (%)	15 (1.09%)	5 (1.08%)	10 (1.10%)
	African: n (%)	20 (1.46%)	7 (1.52%)	13 (1.43%)
	Asian: n (%)	144 (10.49%)	55 (11.90%)	89 (9.77%)
	Oceanian: n (%)	3 (0.22%)	0 (0.00%)	3 (0.33%)
	Other: n (%)	4 (0.29%)	1 (0.22%)	3 (0.33%)
	Prefer not to say: n (%)	38 (2.77%)	16 (3.46%)	22 (2.41%)
Spirituality	Buddhist: n (%)	17 (1.25%)	6 (1.30%)	11 (1.21%)
	Christian: n (%)	578 (42.09%)	162 (35.06%)	416 (45.65%)
	Hindu: n (%)	12 (0.87%)	8 (1.73%)	4 (0.44%)
	Jewish: n (%)	19 (1.38%)	10 (2.16%)	9 (0.99%)

	Muslim: n (%)	31 (2.26%)	10 (2.16%)	21 (2.31%)
	Sikh: n (%)	13 (0.95%)	6 (1.30%)	7 (0.77%)
	Traditional (North American Indigenous) spirituality: n (%)	21 (1.53%)	8 (1.73%)	13 (1.43%)
	Other: n (%)	26 (1.89%)	10 (2.16%)	16 (1.76%)
	No religious or spiritual affiliations: n (%)	601 (43.77%)	218 (47.19%)	383 (42.04%)
	Prefer not to say: n (%)	55 (4.01%)	24 (5.19%)	31 (3.40%)
Marital status	Never legally married: n (%)	329 (23.96%)	133 (28.79%)	196 (21.52%)
	Legally married: n (%)	647 (47.12%)	185 (40.04%)	462 (50.71%)
	Separated, but still legally married: n (%)	40 (2.92%)	20 (4.33%)	20 (2.20%)
	Divorced: n (%)	116 (8.45%)	42 (9.09%)	74 (8.12%)
	Widowed: n (%)	50 (3.64%)	15 (3.25%)	35 (3.84%)
	Living common law: n (%)	170 (12.38%)	57 (12.34%)	113 (12.40%)
	Prefer not to say: n (%)	21 (1.53%)	10 (2.16%)	11 (1.21%)
Number of people in the household	Mean	2.50	2.53	2.48
	SD	1.28	1.34	1.25
	Min	1.00	1.00	1.00
	Max	10.00	10.00	9.00
	Less than \$50,000: n (%)	388 (28.26%)	139 (30.09%)	249 (27.33%)

Household income (CAD)	\$50,000 to less than \$60,000: n (%)	172 (12.54%)	62 (13.42%)	110 (12.08%)
	\$60,000 to less than \$80,000: n (%)	185 (13.47%)	58 (12.55%)	127 (13.94%)
	\$80,000 to less than \$100,000: n (%)	192 (13.98%)	59 (12.77%)	133 (14.60%)
	\$100,000 or more: n (%)	350 (25.49%)	104 (22.51%)	246 (27.00%)
	Prefer not to say: n (%)	86 (6.26%)	40 (8.66%)	46 (5.05%)
Work status	Currently working full-time: n (%)	551 (40.13%)	188 (40.69%)	363 (39.85%)
	Currently working part-time: n (%)	123 (8.96%)	38 (8.23%)	85 (9.33%)
	Homemaker, no outside employment: n (%)	54 (3.93%)	18 (3.90%)	36 (3.95%)
	Student: n (%)	51 (3.71%)	19 (4.11%)	32 (3.51%)
	Unemployed: n (%)	52 (3.79%)	25 (5.41%)	27 (2.96%)
	Retired: n (%)	415 (30.23%)	111 (24.03%)	304 (33.37%)
	Long term or permanent disability: n (%)	85 (6.19%)	38 (8.23%)	47 (5.16%)
	Total sick leave with financial assistance: n (%)	15 (1.09%)	9 (1.95%)	6 (0.66%)
	Total sick leave with no financial assistance: n (%)	11 (0.80%)	4 (0.87%)	7 (0.77%)
	Partial sick leave: n (%)	3 (0.22%)	3 (0.65%)	0 (0.00%)

	Prefer not to say: n (%)	13 (0.95%)	9 (1.95%)	4 (0.44%)
Pain characteristics				
Pain location	Head: n (%)	213 (15.51%)	94 (20.35%)	119 (13.06%)
	Face: n (%)	46 (3.35%)	25 (5.41%)	21 (2.31%)
	Neck: n (%)	478 (34.81%)	187 (40.48%)	291 (31.94%)
	Middle back: n (%)	409 (29.79%)	132 (28.57%)	277 (30.41%)
	Low back: n (%)	794 (57.83%)	284 (61.47%)	510 (55.98%)
	Upper limb: n (%)	337 (24.54%)	110 (23.81%)	227 (24.92%)
	Lower limb: n (%)	544 (39.62%)	188 (40.69%)	356 (39.08%)
	Abdominal: n (%)	135 (9.83%)	58 (12.55%)	77 (8.45%)
	Pelvic: n (%)	163 (11.87%)	76 (16.45%)	87 (9.55%)
	Chest: n (%)	73 (5.32%)	32 (6.93%)	41 (4.50%)
	Other: n (%)	9 (0.66%)	3 (0.65%)	6 (0.66%)
	Mean	2.33	2.58	2.21
	SD	1.53	1.78	1.37
	Min	1.00	1.00	1.00
	Max	10.00	10.00	10.00
Pain duration (months)	Mean	102.2	103.3	101.6
	SD	113.95	109.57	116.17
	Min	3.00	3.00	3.00

	Max	708.00	600.00	708.00
	Don't remember precisely: n (%)	135, (9.83%)	46, (9.96%)	89, (9.77%)
Comorbidity	Diabetes: n (%)	204 (14.86%)	63 (13.64%)	141 (15.48%)
	Mental health disorders: n (%)	438 (31.90%)	188 (40.69%)	250 (27.44%)
	Alcohol-related disorders: n (%)	49 (3.57%)	15 (3.25%)	34 (3.73%)
	Substance-related disorders: n (%)	54 (3.93%)	22 (4.76%)	32 (3.51%)
	Sleep disorders: n (%)	417 (30.37%)	147 (31.82%)	270 (29.64%)
	Hypertension: n (%)	373 (27.17%)	104 (22.51%)	269 (29.53%)
	Respiratory disorders: n (%)	193 (14.06%)	61 (13.20%)	133 (14.60%)
	Other: n (%)	178 (12.96%)	62 (13.42%)	116 (12.73%)
	No comorbidity: n (%)	360 (26.22%)	105 (22.73%)	255 (27.99%)
	Mean	1.39	1.42	1.37
	SD	1.20	1.15	1.23
	Min	0.00	0.00	0.00
	Max	6.00	5.00	6.00
Perceived disability and/or emotional distress	Yes: n (%)	689 (50.18%)	252 (54.55%)	437 (47.97%)
	No: n (%)	684 (49.82%)	210 (45.45%)	474 (52.03%)
	Mean	4.57	4.08	4.82

Quality of life (seven-point Likert scale)	SD	1.27	1.27	1.19
	Min	1.00	1.00	1.00
	Max	7.00	7.00	7.00
Health state satisfaction	Yes: n (%)	874 (63.66%)	214 (46.32%)	660 (72.45%)
	No: n (%)	499 (36.34%)	248 (53.68%)	251 (27.55%)
Decision-making characteristics				
Most difficult decision	Take medication: n (%)	278 (20.25%)	87 (18.83%)	191 (20.96%)
	Get surgery: n (%)	252 (18.35%)	73 (15.80%)	179 (19.65%)
	Change my treatment: n (%)	102 (7.44%)	40 (8.66%)	62 (6.81%)
	Stop my treatment: n (%)	60 (4.37%)	23 (4.98%)	37 (4.06%)
	Change my lifestyle habits and behaviours: n (%)	191 (13.91%)	52 (11.26%)	139 (15.26%)
	Consult a rehabilitation professional: n (%)	59 (4.30%)	27 (5.84%)	32 (3.51%)
	Consult a complementary and alternative medicine professional: n (%)	146 (10.63%)	51 (11.04%)	95 (10.43%)
	Consult a mental-health professional: n (%)	50 (3.64%)	15 (3.25%)	35 (3.84%)
	Change the health care provider to manage my condition: n (%)	93 (6.77%)	42 (9.09%)	51 (5.60%)

	Undergo more diagnostic tests: n (%)	139 (10.12%)	50 (10.82%)	89 (9.77%)
	Other: n (%)	3 (0.22%)	2 (0.43%)	1 (0.11%)
Prior knowledge on the available options	Yes, for all the options: n (%)	337 (24.55%)	68 (14.72%)	269 (29.53%)
	Yes, for certain options: n (%)	771 (56.15%)	259 (56.06%)	512 (56.20%)
	No: n (%)	265 (19.30%)	135 (29.22%)	130 (14.27%)
Decision self-efficacy (11-point Likert scale)	Mean	6.42	4.95	7.16
	SD	2.22	2.07	1.91
	Min	0.00	0.00	0.00
	Max	10.00	10.00	10.00
Congruence between the chosen and preferred option	Yes: n (%)	853 (62.13%)	184 (39.83%)	669 (73.44%)
	No: n (%)	198 (14.42%)	115 (24.89%)	83 (9.11%)
	I don't know, I let my health care provider decide for me: n (%)	251 (18.28%)	122 (26.41%)	129 (14.16%)
	Missing data: n (%)	71 (5.17%)	41 (8.87%)	30 (3.29%)
Health literacy (problem understanding what healthcare professionals said)	Always: n (%)	29 (2.12%)	9 (1.95%)	20 (2.20%)
	Often: n (%)	156 (11.36 %)	73 (15.80%)	83 (9.11%)
	Sometimes: n (%)	419 (30.52%)	200 (43.29%)	219 (24.04%)
	Occasionally: n (%)	372 (27.09%)	101 (21.86%)	271 (29.75%)

	Never: n (%)	397 (28.91%)	79 (17.10%)	318 (34.90%)
Perceived stress during the consultation	Yes: n (%)	595 (43.34%)	275 (59.52%)	320 (35.13%)
	No: n (%)	685 (49.89%)	130 (28.14%)	555 (60.92%)
	I don't remember: n (%)	93 (6.77%)	57 (12.34%)	36 (3.95%)
Involvement of important other(s)	Spouse: n (%)	530 (38.60%)	156 (33.77%)	374 (41.05%)
	Children: n (%)	112 (8.16%)	29 (6.28%)	83 (9.11%)
	Friends: n (%)	169 (12.31%)	52 (11.26%)	117 (12.84%)
	Professional occupation in religion: n (%)	45 (3.28%)	14 (3.03%)	31 (3.40%)
	Other member of close family: n (%)	192 (13.98%)	69 (14.94%)	123 (13.50%)
	Other: n (%)	5 (0.36%)	1 (0.22%)	4 (0.44%)
	Nobody: n (%)	595 (43.33%)	212 (45.89%)	383 (42.04%)
Congruence between assumed and preferred decision role	Yes: n (%)	685 (49.89%)	172 (37.23%)	513 (56.31%)
	No: n (%)	688 (50.11%)	290 (62.77%)	398 (43.69%)
Perception of assumed decision role	I made the decision alone: n (%)	371 (27.02%)	152 (32.90%)	219 (24.04%)
	I made the decision alone but considered the opinion of my health care providers: n (%)	436 (31.76%)	150 (32.47%)	286 (31.39%)

	My health care providers and I decided together, equally: n (%)	372 (27.09%)	75 (16.23%)	297 (32.60%)
	My health care providers made the decision but considered my opinion: n (%)	126 (9.18%)	45 (9.74%)	81 (8.89%)
	My health care providers made the decision alone: n (%)	68 (4.95%)	40 (8.66%)	28 (3.08%)
Considered elements during the decision-making process	Option's cost: n (%)	369 (26.88%)	125 (27.06%)	244 (26.78%)
	Pressure from others: n (%)	120 (8.74%)	53 (11.47%)	67 (7.35%)
	Time to implement the option: n (%)	256 (18.65%)	93 (20.13%)	163 (17.89%)
	Time before potential outcome: n (%)	324 (23.60%)	118 (25.54%)	206 (22.61%)
	Delay in accessing the option: n (%)	234 (17.04%)	94 (20.35%)	140 (15.37%)
	Potential benefits: n (%)	678 (49.38%)	207 (44.81%)	471 (51.70%)
	Potential harms: n (%)	581 (42.32%)	198 (42.86%)	383 (42.04%)
	Option's consequences on your social, familial, or affective life: n (%)	359 (26.15%)	127 (27.49%)	232 (25.47%)
	Option's consequences on your diet and consumptions: n (%)	232 (16.90%)	78 (16.88%)	154 (16.90%)
	Option's consequences on a potential pregnancy: n (%)	54 (3.93%)	20 (4.33%)	34 (3.73%)

	Option's consequences on your leisure: n (%)	329 (23.96%)	110 (23.81%)	219 (24.04%)
	Option's consequences on your work or occupation: n (%)	342 (24.91%)	99 (21.43%)	243 (26.67%)
	Option's consequences on your mobility: n (%)	412 (30.00%)	133 (28.79%)	279 (30.63%)
	Environmental impacts of the option: n (%)	60 (4.37%)	20 (4.33%)	40 (4.39%)
	Other: n (%)	12 (0.87%)	6 (1.30%)	6 (0.66%)
	No element: n (%)	82 (5.97%)	35 (7.58%)	47 (5.16%)
Decisional conflict (0-100)	Mean	30.76	49.56	21.23
	SD	17.02	9.96	10.78
	Min	0.00	37.50	0.00
	Max	93.75	93.75	35.94

Supplementary Table S2: Results of non-ODSF model and the sensitivity analyses

1. Regression coefficients of the multilevel linear regression model based on the Ottawa Decision Support Framework.

Personal characteristics		
Variable	Beta	95% CI
Age	-0.03	-0.08 to 0.02
Cultural and ethnical backgrounds		
Only north american (except Aboriginal)	REF	REF
Multiple origins (north american + other)	-0.67	-3.53 to 2.19
Only other	-0.39	-1.84 to 1.06
Education level		
Above the bachelor's level	REF	REF
Bachelor's degree	-1.81	-4.13 to 0.51
University diploma below bachelor's level	-1.42	-4.34 to 1.49
College, CEGEP or other non-university diploma	-1.72	-4.07 to 0.62
High school or equivalency	-2.23	-4.75 to 0.30
Less than high school or equivalency	-2.76	-7.98 to 2.47
Geographical area		
Urban	REF	REF
Rural	-0.78	-2.94 to 1.39
Household income (in CAD)		
Less than 50,000	REF	REF
50,000 to less than 60,000	1.80	-0.51 to 4.10
60,000 to less than 80,000	0.79	-1.52 to 3.10
80,000 to less than 100,000	0.44	-1.83 to 2.71
100,000 or more	0.89	-1.09 to 2.87
Pain duration	-0.00	-0.01 to 0.01

Quality of life*	-2.42	-3.01 to -1.84
Sex		
Male	REF	REF
Female*	1.48	0.09 to 2.87
Intersex	-0.50	-13.43 to 12.43
Spirituality		
No	REF	REF
Yes	-0.58	-2.01 to 0.85
Decision-making characteristics		
Variable	Beta	95% CI
Assumed role		
I made the decision alone (Active role)	REF	REF
I made the decision alone but considered the opinion of my health care providers	-0.69	-2.49 to 1.12
My health care providers and I decided together, equally (Collaborative role)*	-3.13	-5.06 to -1.19
My health care providers made the decision but considered my opinion	-1.60	-4.28 to 1.08
My health care providers made the decision alone (Passive role)	4.01	0.62 to 7.40
Congruence between the assumed and preferred role		
No	REF	REF
Yes*	-3.58	-5.02 to -2.14
Decision self-efficacy*	-3.05	-3.41 to -2.68
Health literacy (problem understanding what doctor says)		
Never	REF	REF
Occasionally	0.93	-0.91 to 2.76
Sometimes*	4.18	2.32 to 6.05
Often*	3.91	1.38 to 6.43

Always*	-7.79	-12.84 to -2.73
Involvement of important other(s)		
No	REF	REF
Yes	0.35	-1.10 to 1.80
Most difficult decision		
Take medication	REF	REF
Get surgery	-0.13	-2.34 to 2.07
Change treatment	1.42	-1.51 to 4,35
Stop my treatment	-0.50	-4.15 to 3.14
Change lifestyle habits and behaviors	-1.44	-3.82 to 0.93
Consult a rehabilitation professional	0.73	-2.89 to 4.36
Consult a CAM professional	-1.02	-3.59 to 1.55
Consult a mental-health professional*	-4.83	-8.73 to -0.94
Change the healthcare provider*	5.17	2.10 to 8.24
Undergo more diagnostic tests	-0.93	-3.55 to 1.70
Other	3.15	-11.43 to 17.74
Prior knowledge on the options		
On all the options	REF	REF
On certain options*	3.92	2.22 to 5.62
No prior knowledge*	4.64	2.38 to 6.89
Adjustment variable		
Variable	Beta	95% CI
Accuracy of the recall of the consultation*	-0.08	-0.11 to -0.06

- * Statistically significant

CAM: Complementary and Alternative Medicine

CAD: Canadian Dollar

2. Regression coefficients of the multilevel linear regression model based on the Ottawa Decision Support Framework and expanded with the non-ODSF.

Personal characteristics		
Variable	Beta	95% CI
Age	-0.02	-0.08 to 0.03
Comorbidity		
No comorbidity	0.66	-1.45 to 2.78
Presence of diseases of the respiratory system	-1.00	-2.97 to 0.98
Presence of hypertension	-0.50	-2.25 to 1.26
Presence of sleep disorders	-0.14	-1.74 to 1.47
Presence of substance-related disorders	-1.29	-4.83 to 2.25
Presence of alcohol-related disorders*	-4.83	-8.52 to -1.15
Presence of mental-health disorders	1.24	-0.58 to 3.05
Presence of diabetes	0.25	-1.77 to 2.27
Presence of other comorbidities	1.67	-0.54 to 3.88
Cultural and ethnical backgrounds		
Only North American (except Aboriginal)	REF	REF
Multiple origins (North American + other)	-0.95	-3.75 to 1.84
Only other	-0.33	-1.79 to 1.14
Education level		
Above the bachelor's level	REF	REF
Bachelor's degree	-1.71	-3.94 to 0.52
University diploma below bachelor's level	-0.90	-3.72 to 1.92
College, CEGEP or other non-university diploma	-1.59	-3.86 to 0.68
High school or equivalency	-1.94	-4.40 to 0.52
Less than high school or equivalency	-2.70	-7.78 to 2.39
First learned language		
English or French	REF	REF
Other	1.48	-0.92 to 3.89

Geographical area		
Urban	REF	REF
Rural	-0.56	-2.68 to 1.57
Household income (in CAD)		
Less than 50,000	REF	REF
50,000 to less than 60,000	1.14	-1.12 to 3.40
60,000 to less than 80,000	0.32	-2.03 to 2.67
80,000 to less than 100,000	0.79	-1.48 to 3.06
100,000 or more	1.20	-0.84 to 3.24
Number of people currently living in the household	-0.44	-1.02 to 0.13
Pain duration	0.00	-0.01 to 0.01
Pain location		
Presence of head pain	-1.33	-3.39 to 0.71
Presence of face pain	2.69	-1.27 to 6.65
Presence of neck pain	-0.50	-2.01 to 1.00
Presence of middle back pain	-0.67	-2.27 to 0.92
Presence of low back pain	0.88	-0.58 to 2.35
Presence of upper limb pain	-0.43	-2.01 to 1.15
Presence of lower limb pain	1.29	-0.14 to 2.71
Presence of chest pain	1.10	-2.07 to 4.27
Presence of abdominal pain	0.42	-1.99 to 2.83
Presence of pelvic pain*	2.41	0.25 to 4.58
Quality of life*	-1.18	-1.83 to -0.54
Satisfaction with current health state		
Yes	REF	REF
No*	3.14	1.56 to 4.73
Self-perception of disability and/or emotional distress		
Yes	REF	REF

No	0.95	-0.50 to 2.40
Sex		
Male	REF	REF
Female	0.50	-0.92 to 1.92
Intersex	3.14	-9.50 to 15.79
Spirituality		
No	REF	REF
Yes	-0.54	-1.93 to 0.86
Decision-making characteristics		
Variable	Beta	95% CI
Assumed role		
I made the decision alone (Active role)	REF	REF
I made the decision alone but considered the opinion of my health care providers	-0.48	-2.26 to 1.31
My health care providers and I decided together, equally (Collaborative role)*	-2.86	-4.77 to -0.95
My health care providers made the decision but considered my opinion	-1.76	-4.38 to 0.85
My health care providers made the decision alone (Passive role)*	3.58	0.26 to 6.89
Congruence between the assumed and preferred role		
No	REF	REF
Yes*	-3.50	-4.90 to -2.10
Congruence between the chosen and preferred option		
Yes	REF	REF
No*	7.25	5.18 to 9.32
I don't know, I let my health care provider decide for me*	3.22	1.38 to 5.06
Considered element during the decision-making process		

No element considered	0.96	-2.11 to 4.02
Options' consequences on mobility	-0.06	-1.72 to 1.61
Options' consequences on environment*	-4.61	-7.99 to -1.23
Options' consequences on work	-1.14	-2.83 to 0.55
Options' consequences on leisure	0.82	-0.94 to 2.58
Options' consequences on pregnancy	-2.66	-6.22 to 0.90
Options' consequences on diet and consumptions	0.89	-1.00 to 2.78
Options' consequences on social, familial, and affective life	0.46	-1.22 to 2.13
Options' potential harms	0.30	-1.25 to 1.85
Options' potential benefits	0.40	-1.08 to 1.87
Delay in accessing the option	-0.31	-2.23 to 1.62
Time before potential outcome	0.14	-1.56 to 1.84
Time to implement the option	1.25	-0.63 to 3.14
Pressure from others to choose a particular option	1.64	-0.78 to 4.07
Decision self-efficacy*	-2.67	-3.03 to -2.31
Health literacy (problem understanding what doctor says)		
Never	REF	REF
Occasionally	0.67	-1.10 to 2.45
Sometimes*	3.34	1.49 to 5.18
Often*	3.22	0.72 to 5.72
Always*	-8.33	-13.26 to -3.40
Involvement of important other(s)		
No	REF	REF
Yes	0.03	-1.41 to 1.48
Most difficult decision		
Take medication	REF	REF
Get surgery	-0.60	-2.83 to 1.61

Change treatment	1.22	-1.64 to 4.08
Stop my treatment	-0.72	-4.25 to 2.81
Change lifestyle habits and behaviors	-1.00	-3.40 to 1.41
Consult a rehabilitation professional	1.03	-2.52 to 4.59
Consult a CAM professional	-0.49	-3.06 to 2.08
Consult a mental-health professional*	-5.39	-9.27 to -1.53
Change the healthcare provider*	3.19	0.12 to 6.26
Undergo more diagnostic tests	-0.76	-3.38 to 1.86
Other	-5.17	-19.34 to 8.99
Prior knowledge on the options		
On all the options	REF	REF
On certain options*	3.89	2.22 to 5.56
No prior knowledge*	4.19	1.93 to 6.46
Self-perception of being stressed during the consultation		
Yes	REF	REF
No*	-4.69	-6.21 to -3.17
Adjustment variable		
Variable	Beta	95% CI
Accuracy of the recall of the consultation*	-0.08	-0.11 to -0.05

- * Statistically significant

CAM: Complementary and Alternative Medicine

CAD: Canadian Dollar

3. Comparison between the results of model 1 and the complete case sensitivity analysis.

Personal characteristics				
Variable	Odd ratio (model 1)	95% CI (model 1)	Odd ratio (CCA)	95% CI (CCA)
Age	0.98	0.97 to 1	0.99	0.97 to 0.99
Cultural and ethnical backgrounds				
Only North American (except Aboriginal)	REF	REF	REF	REF
Multiple origins (North American + other)	0.93	0.51 to 1.71	0.63	0.29 to 1.30
Only other	0.88	0.65 to 1.18	0.72	0.51 to 1.03
Education level				
Above the bachelor's level	REF	REF	REF	REF
Bachelor's degree	0.64	0.40 to 1.02	0.50	0.29 to 0.84
University diploma below bachelor's level	0.78	0.43 to 1.40	0.63	0.31 to 1.26
College, CEGEP or other non-university diploma	0.81	0.50 to 1.31	0.57	0.34 to 0.97
High school or equivalency	0.69	0.41 to 1.16	0.64	0.35 to 1.16
Less than high school or equivalency	0.57	0.20 to 1.69	0.56	0.14 to 2.10
Geographical area				

Urban	REF	REF	REF	REF
Rural	1.26	0.80 to 1.98	1.38	0.80 to 2.37
Household income (in CAD)				
Less than 50,000	REF	REF	REF	REF
50,000 to less than 60,000	1.10	0.67 to 1.80	0.99	0.57 to 1.72
60,000 to less than 80,000	1.06	0.65 to 1.74	0.90	0.51 to 1.59
80,000 to less than 100,000	1.08	0.67 to 1.74	0.90	0.52 to 1.56
100,000 or more	1.14	0.75 to 1.74	1.01	0.64 to 1.62
Pain duration	1.00	1 to 1	1.00	1 to 1
Quality of life	0.71	0.63 to 0.81	0.68	0.59 to 0.79
Sex				
Male	REF	REF	REF	REF
Female	1.12	0.84 to 1.50	1.02	0.73 to 1.44
Intersex	0.62	0.06 to 6.88	1.67	0.05 to 61.1
Spirituality				
No	REF	REF	REF	REF
Yes	0.83	0.62 to 1.11	0.86	0.61 to 1.21
Decision-making characteristics				

Variable	Odd ratio (model 1)	95% CI (model 1)	Odd ratio (CCA)	95%CI (CCA)
Assumed role				
I made the decision alone (Active role)	REF	REF	REF	REF
I made the decision alone but considered the opinion of my health care providers	0.86	0.60 to 1.24	0.85	0.55 to 1.30
My health care providers and I decided together, equally (Collaborative role)	0.46	0.30 to 0.69	0.50	0.30 to 0.83
My health care providers made the decision but considered my opinion	0.69	0.40 to 1.17	0.66	0.35 to 1.26
My health care providers made the decision alone (Passive role)	1.22	0.64 to 2.34	1.04	0.49 to 2.20
Congruence between the assumed and preferred role				
No	REF	REF	REF	REF
Yes	0.57	0.43 to 0.77	0.59	0.41 to 0.83
Decision self-efficacy	0.65	0.59 to 0.70	0.62	0.56 to 0.68
Health literacy (problem understanding what doctor says)				
Never	REF	REF	REF	REF

Occasionally	1.28	0.85 to 1.93	1.81	1.11 to 2.94
Sometimes	2.43	1.65 to 3.58	2.96	1.87 to 4.70
Often	2.23	1.34 to 3.69	2.80	1.51 to 5.17
Always	0.66	0.20 to 2.14	0.55	0.13 to 2.04
Involvement of important other(s)				
No	REF	REF	REF	REF
Yes	0.97	0.72 to 1.31	0.99	0.70 to 1.42
Most difficult decision				
Take medication	REF	REF	REF	REF
Get surgery	1.12	0.70 to 1.81	1.16	0.68 to 1.98
Change treatment	1.30	0.73 to 2.32	1.22	0.57 to 2.58
Stop my treatment	0.84	0.41 to 1.72	0.71	0.27 to 1.74
Change lifestyle habits and behaviors	0.66	0.40 to 1.10	0.71	0.39 to 1.27
Consult a rehabilitation professional	1.13	0.55 to 2.29	1.21	0.51 to 2.84
Consult a CAM professional	1.15	0.69 to 1.94	1.06	0.59 to 1.93
Consult a mental-health professional	0.42	0.18 to 0.95	0.44	0.13 to 1.33
Change the healthcare provider	1.79	0.99 to 3.25	2.25	1.13 to 4.52
Undergo more diagnostic tests	0.77	0.45 to 1.33	0.69	0.36 to 1.30

Other	12.23	0.17 to 876	15.1	0.2 to 1086
Prior knowledge on the options				
On all the options	REF	REF	REF	REF
On certain options	1.47	1.00 to 2.14	1.27	0.83 to 1.94
No prior knowledge	2.03	1.27 to 3.25	1.29	0.73 to 2.29
Adjustment variable				
Variable	Odd ratio (model 1)	95% CI (model 1)	Odd ratio (CCA)	95%CI (CCA)
Accuracy of the recall of the consultation	0.99	0.98 to 0.99	0.99	0.98 to 0.99

CCA: Complete case analysis

CAM: Complementary and Alternative Medicine

CAD: Canadian Dollar

Supplementary Table S3: Comparison of total and attrition sample profiles

Characteristics	Descriptives analyses	All sample (n=1,649)	PwCP with DCS score (n=1,373)
Socio-demographic characteristics			
Age (years)	Mean	51.84	52
	SD	16.33	16.36
	Min	18.00	18.00
	Max	90.00	90.00
Sex	Male: n (%)	854 (51.79%)	686 (49.97%)
	Female: n (%)	789 (47.85%)	682 (49.67%)
	Intersex: n (%)	4 (0.24%)	4 (0.29%)
	Prefer not to say: n (%)	2 (0.12%)	1 (0.07%)
Gender	Man: n (%)	847 (51.36%)	680 (49.53%)
	Woman: n (%)	777 (47.12%)	671 (48.87%)
	Non-binary: n (%)	10 (0.61%)	8 (0.58%)
	Transgender woman: n (%)	1 (0.06%)	1 (0.07%)
	Transgender man: n (%)	2 (0.12%)	2 (0.15%)
	Two-spirit: n (%)	3 (0.18%)	3 (0.22%)

	Gender fluid: n (%)	4	(0.24%)	3	(0.22%)
	Other: n (%)	0	(0.00%)	0	(0.00%)
	Prefer not to say: n (%)	0	(0.00%)	0	(0.00%)
	Missing data: n (%)	5	(0.30%)	5	(0.36%)
Provinces	British Columbia: n (%)	268	(16.25%)	220	(16.02%)
	Alberta: n (%)	217	(13.16%)	188	(13.69%)
	Prairies: n (%)	121	(7.34%)	103	(7.50%)
	Ontario: n (%)	579	(35.11%)	487	(35.47%)
	Quebec: n (%)	332	(20.13%)	273	(19.89%)
	Atlantic Canada: n (%)	132	(8.00%)	102	(7.43%)
Geographical area	Rural: n (%)	202	(12.25%)	162	(11.80%)
	Urban: n (%)	1447	(87.75%)	1211	(88.20%)
First learned language	French: n (%)	378	(22.92%)	315	(22.94%)
	English: n (%)	1122	(68.04%)	931	(67.80%)
	An aboriginal language: n (%)	2	(0.12%)	2	(0.15%)
	Spanish: n (%)	10	(0.61%)	9	(0.66%)
	Mandarin: n (%)	15	(0.91%)	15	(1.09%)
	Arabic: n (%)	9	(0.55%)	9	(0.66%)

	Other: n (%)	113 (6.85%)	92 (6.70%)
Education level	Less than a high school diploma: n (%)	46 (2.79%)	30 (2.19%)
	High School diploma: n (%)	338 (20.50%)	264 (19.23%)
	College, CEGEP or other non-university certificate or diploma: n (%)	479 (29.05%)	405 (29.50%)
	University certificate: n (%)	163 (9.88%)	135 (9.83%)
	Bachelor's degree: n (%)	398 (24.14%)	351 (25.56%)
	Above the bachelor's level: n (%)	213 (12.92%)	181 (13.18%)
	Prefer not to say: n (%)	12 (0.73%)	7 (0.51%)
Literacy	Always: n (%)	32 (1.94%)	29 (2.12%)
	Often: n (%)	172 (10.43%)	156 (11.36 %)
	Sometimes: n (%)	482 (29.23%)	419 (30.52%)
	Occasionally: n (%)	456 (27.65%)	372 (27.09%)
	Never: n (%)	507 (30.75%)	397 (28.91%)
Cultural and ethnical backgrounds	Aboriginal: n (%)	84 (5.09%)	74 (5.39%)
	North American: n (%)	770 (46.69%)	626 (45.59%)
	European: n (%)	662 (40.15%)	552 (40.20%)
	Caribbean: n (%)	24 (1.46%)	20 (1.46%)
	Latin, south American: n (%)	16 (0.97%)	15 (1.09%)

	African: n (%)	22	(1.33%)	20	(1.46%)
	Asian: n (%)	169	(10.25%)	144	(10.49%)
	Oceanian: n (%)	3	(0.18%)	3	(0.22%)
	Other: n (%)	4	(0.24%)	4	(0.29%)
	Prefer not to say: n (%)	49	(2.97%)	38	(2.77%)
	Missing data: n (%)	4	(0.24%)	0	(0.00%)
Spirituality	Buddhist: n (%)	18	(1.09%)	17	(1.25%)
	Christian: n (%)	694	(42.09%)	578	(42.09%)
	Hindu: n (%)	14	(0.85%)	12	(0.87%)
	Jewish: n (%)	22	(1.33%)	19	(1.38%)
	Muslim: n (%)	32	(1.94%)	31	(2.26%)
	Sikh: n (%)	15	(0.91%)	13	(0.95%)
	Traditional (North American Indigenous) spirituality: n (%)	21	(1.27%)	21	(1.53%)
	Other: n (%)	33	(2.00%)	26	(1.89%)
	No religious or spiritual affiliations: n (%)	735	(44.57%)	601	(43.77%)
	Prefer not to say: n (%)	64	(3.88%)	55	(4.01%)
	Missing data: n (%)	1	(0.06%)	0	(0.00%)
Marital status	Never legally married: n (%)	402	(24.38%)	329	(23.96%)

	Legally married: n (%)	759 (46.03%)	647 (47.12%)
	Separated, but still legally married: n (%)	49 (2.97%)	40 (2.92%)
	Divorced: n, (%)	144 (8.73%)	116 (8.45%)
	Widowed: n (%)	60 (3.64%)	50 (3.64%)
	Living common law: n (%)	210 (12.73%)	170 (12.38%)
	Prefer not to say: n (%)	25 (1.52%)	21 (1.53%)
Number of people in the household	Mean	2.45	2.50
	SD	1.28	1.28
	Min	1.00	1.00
	Max	10.00	10.00
Household income (CAD)	Less than \$50,000: n (%)	481 (29.17%)	388 (28.26%)
	\$50,000 to less than \$60,000: n (%)	199 (12.07%)	172 (12.54%)
	\$60,000 to less than \$80,000: n (%)	215 (13.04%)	185 (13.47%)
	\$80,000 to less than \$100,000: n (%)	233 (14.13%)	192 (13.98%)
	\$100,000 or more: n (%)	406 (24.62%)	350 (25.49%)
	Prefer not to say: n (%)	115 (6.97%)	86 (6.26%)
Work status	Currently working full-time: n (%)	649 (39.36%)	551 (40.13%)
	Currently working part-time: n (%)	153 (9.28%)	123 (8.96%)

	Homemaker, no outside employment: n (%)	59	(3.58%)	54	(3.93%)
	Student: n (%)	65	(3.94%)	51	(3.71%)
	Unemployed: n (%)	64	(3.88%)	52	(3.79%)
	Retired: n (%)	505	(30.62%)	415	(30.23%)
	Long term or permanent disability: n (%)	106	(6.43%)	85	(6.19%)
	Total sick leave with financial assistance: n (%)	16	(0.97%)	15	(1.09%)
	Total sick leave with no financial assistance: n (%)	11	(0.67%)	11	(0.80%)
	Partial sick leave: n (%)	3	(0.18%)	3	(0.22%)
	Prefer not to say: n (%)	18	(1.09%)	13	(0.95%)
Pain characteristics					
Pain location	Head: n (%)	246	(14.92%)	213	(15.51%)
	Face: n (%)	59	(3.58%)	46	(3.35%)
	Neck: n (%)	555	(33.66%)	478	(34.81%)
	Middle back: n (%)	465	(28.20%)	409	(29.79%)
	Low back: n, (%)	944	(57.25%)	794	(57.83%)
	Upper limb: n (%)	414	(25.11%)	337	(24.54%)
	Lower limb: n (%)	666	(40.39%)	544	(39.62%)
	Abdominal: n (%)	149	(9.04%)	135	(9.83%)

	Pelvic: n (%)	191 (11.58%)	163 (11.87%)
	Chest: n (%)	86 (5.22%)	73 (5.32%)
	Other: n (%)	12 (0.73%)	9 (0.66%)
	Missing data: n (%)	2 (0.12%)	0 (0.00%)
	Mean	2.30	2.33
	SD	1.52	1.53
	Min	1.00	1.00
	Max	10.00	10.00
Pain duration (months)	Mean	102.12	102.2
	SD	115.36	113.95
	Min	3.00	3.00
	Max	708.00	708.00
	Don't remember precisely: n (%)	202 (12.25%)	135 (9.83%)
Comorbidity	Diabetes: n (%)	243 (14.74%)	204 (14.86%)
	Mental health disorders: n (%)	501 (30.38)	438 (31.90%)
	Alcohol use disorders: n (%)	53 (3.21%)	49 (3.57%)
	Substance use disorders: n (%)	58 (3.52%)	54 (3.93%)
	Sleep disorders: n (%)	489 (29.65%)	417 (30.37%)

	Hypertension: n (%)	436 (26.44%)	373 (27.17%)
	Respiratory disorders: n (%)	227 (13.77%)	193 (14.06%)
	Other: n (%)	195 (11.83%)	178 (12.96%)
	No comorbidity: n (%)	465 (28.20%)	360 (26.22%)
	Mean	1.34	1.39
	SD	1.20	1.20
	Min	0.00	0.00
	Max	6.00	6.00
Perceived disability and/or emotional distress	Yes: n (%)	794 (48.15%)	689 (50.18%)
	No: n (%)	855 (51.85%)	684 (49.82%)
Quality of life (seven-point Likert scale)	Mean	4.59	4.57
	SD	1.25	1.27
	Min	1.00	1.00
	Max	7.00	7.00
Health state satisfaction	Yes: n (%)	1080 (65.49%)	874 (63.66%)
	No: n (%)	569 (34.51%)	499 (36.34%)

Supplementary Methods S4: Detailed information on the methods

1. R packages

Purpose	Package
Data preparation	dplyr readxl
Data visualizations	ggplot2 sjPlot
Multiple Imputation by Chained Equations	mice
Multilevel regression	lme4 broom.mixed performance lmerTest
Forest plot	checkmate abind foresplot grid
Missing data	performance VIM howManyImputations
Sample size	pmsampsize

2. Missing data and multiple imputation

Missing data could be observed due to data cleaning, “prefer not to say” response option, and “I don’t remember” response option. We assumed that the missing data were Missing At Random (MAR).

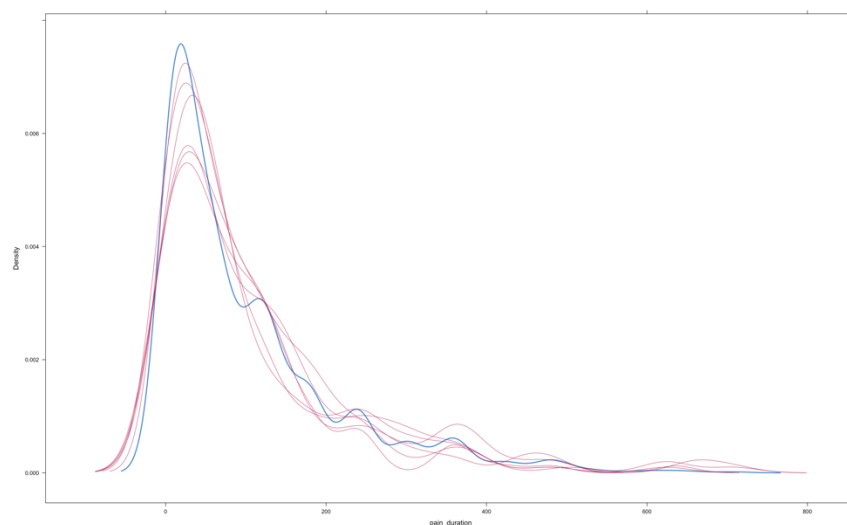
Distribution of the missing data:

We observed missing data on eleven independent variables ranged between 9.8% (pain duration) and 0.07% (sex) of missing data.

We observed missing data on 357 (26%) observations ranged between 6.93% and 0.99% of missing data.

Imputation model:

We checked the consistency of the imputed data with data visualization (function densityplot of the MICE package) (see example below).



3. Recoding of variables:

We performed recoding of variables such as reduction of categories or modification of the reference category. More precisely, we created two variables:

- Congruence between the assumed and preferred role combining two variables (assumed role and preferred role)
- Geographical area using the three first characters of the postal code (1)

We modified five variables:

- Involvement of important other(s): from 6 variables (e.g., spouse, children, friends) to 2 categories (i.e., presence or absence of important other(s)).
- Ethnical and cultural backgrounds: from 9 variables (e.g., North American, African) to 3 categories (i.e., North American (except Aboriginals), multiple origins: North American + Other, Other)
- Spirituality: from 10 categories (e.g., Buddhist, Muslim) to 2 categories (i.e., presence or absence of spirituality)
- First learned language: from 7 categories (e.g., English, French, Aboriginal language) to 2 categories (i.e., The two official Canadian languages, Other).

We modified the reference category of three variables due to a greater frequency:

- Spirituality
- Health literacy
- Education level.

References:

1. Statistics Canada. How Postal Codes Map to Geographic Areas 2007 [Available from: <https://www150.statcan.gc.ca/n1/pub/92f0138m/2007001/4144811-eng.htm>].