

■ eAppendix D. Summary of All Patient-Reported Measures of Disease Control and Process Adherence Outcomes^a

Study	Year	Outcome	Desired Effect Direction ^b	Intervention				Control				Total Change (I – C)	Difference ^c
				No.	Baseline	Follow-up	Change	No.	Baseline	Follow-up	Change		
Measures of disease control													
Goulis ⁴⁸	2004	BMI (kg/m ²)	<	45	37.6 ± 8.0	33.7 ± 5.2	-3.9	77	37.8 ± 7.8	37.2 ± 8.7	-0.6	-3.3	NS
Goulis ⁴⁸	2004	Diastolic blood pressure (mm Hg)	<	45	80.7 ± 11.7	74.6 ± 8.5	-6.1	77	79.7 ± 11.5	79.5 ± 14.0	-0.2	-5.9	NS
Goulis ⁴⁸	2004	Systolic blood pressure (mm Hg)	<	45	134.6 ± 18.2	123.8 ± 14.2	-10.8	77	132.1 ± 20.9	128.6 ± 19.4	-3.5	-7.3	NS
Goulis ⁴⁸	2004	Weight (kg)	<	45	101.6 ± 22.4	89.2 ± 14.7	-12.4	77	101.6 ± 21.3	99.6 ± 23.8	-2.0	-10.4	+
Goulis ⁴⁸	2004	Obesity Assessment Survey—summary score	>	45	57.8 ± 14.6	45.9 ± 19.6	-11.9	77	51.2 ± 12.0	50.8 ± 16.5	-0.4	-11.5	NS
Hyman ⁴⁶	1998	Weight (kg)	<	65	86.7	85.7 ± 18.4	-1.0	58	87.5	86.6 ± 18.4	-0.9	-0.1	NS
Piette ²⁴	2001	Mean number of all diabetes-related symptoms reported	<	132	4.3 ± 3.6	3.7 ± 0.2	-0.6	140	3.9 ± 3.4	4.4 ± 0.2	0.5	-1.1	+
Piette ²⁴	2001	Mean number of hyperglycemic symptoms	<	132	1.6 ± 1.5	1.4 ± 0.1	-0.2	140	1.5 ± 1.4	1.6 ± 0.1	0.1	-0.3	NS
Piette ²⁴	2001	Mean number of hypoglycemic symptoms	<	132	1.3 ± 1.3	1.1 ± 0.1	-0.2	140	1.2 ± 1.6	1.4 ± 0.1	0.2	-0.4	NS
Piette ²⁴	2001	Mean number of other symptoms	<	132	0.7 ± 1.0	0.6 ± 0.7	-0.1	140	0.6 ± 0.8	0.8 ± 0.7	0.2	-0.3	+
Piette ²⁴	2001	Mean number of vascular symptoms	<	132	0.7 ± 0.8	0.6 ± 0.7	-0.1	140	0.6 ± 0.7	0.7 ± 0.6	0.1	-0.2	NS
Piette ²⁴	2001	Any medication problem (%)	<	132	56.0	45.0	-11.0	140	46.0	39.0	-7.0	-4.0	NS
Piette ³²	2000	Median number of all diabetes-related symptoms reported	<	124	5.0	4.0	-1.0	124	4.0	6.0	2.0	-3.0	+
Piette ³²	2000	Median number of hyperglycemic symptoms	<	124	2.0	1.6	-0.4	124	1.0	2.0	1.0	-1.4	+
Piette ³²	2000	Median number of hypoglycemic symptoms	<	124	1.0	1.0	0.0	124	1.0	2.0	1.0	-1.0	+
Piette ³²	2000	Median number of other symptoms	<	124	1.0	0.0	-1.0	124	1.0	1.0	0.0	-1.0	NS
Piette ³²	2000	Median number of vascular symptoms	<	124	1.0	1.0	0.0	124	0.0	1.0	1.0	-1.0	NS
Piette ³²	2000	Any medication problem (%)	<	124		55.0		124		78.0		-23.0	+
Vollmer ⁴⁰	2006	Asthma Impact Survey— summary score	<	481	48.1 ± 10.0	46.8 ± 9.7	-1.3	487	46.6 ± 10.1	47.4 ± 9.4	0.8	-2.1	NS
Vollmer ⁴⁰	2006	Mini-Juniper Asthma Impact Survey— summary score	<	481	5.0 ± 1.2	5.2 ± 1.2	0.2	487	5.2 ± 1.3	5.1 ± 1.2	-0.1	0.3	NS
Naylor ⁵¹	2008	TOPS Total Pain Experience— summary score	<	26	50.1 ± 11.3	40.8 ± 12.8	-9.3	25	54.9 ± 7.0	56.1 ± 10.3	1.2	-10.5	+
Naylor ⁵¹	2008	Coping Strategy Questionnaire— ability to control pain	>	26	3.4 ± 1.5	4.2 ± 1.3	0.8	25	3.4 ± 1.2	3.1 ± 1.4	-0.3	1.1	+
Naylor ⁵¹	2008	Coping Strategy Questionnaire—ability to decrease pain	>	26	3.2 ± 1.0	3.9 ± 1.3	0.7	25	3.0 ± 1.2	2.7 ± 1.3	-0.3	1.0	+
Naylor ⁵¹	2008	McGill Pain Questionnaire—pain now score	<	26	4.3 ± 2.3	3.3 ± 2.3	-1.0	25	5.4 ± 2.7	5.2 ± 2.4	-0.2	-0.8	+
Naylor ⁵¹	2008	McGill Pain Questionnaire—pain typical score	<	26	5.5 ± 1.9	4.0 ± 2.3	-1.5	25	5.6 ± 2.1	5.7 ± 1.9	0.1	-1.6	+
Greist ²²	2002	Yale-Brown Obsessive Compulsive Scale— summary score	<	74	24.6 ± 4.3	19.0 ± 7.2	-5.6	75	25.7 ± 5.1	24.1 ± 6.7	-1.6	-4.0	+
Greist ²²	2002	Hamilton Rating Scale for Depression— summary score	<	74	9.6 ± 7.9	9.6 ± 7.9	0.0	75	9.7 ± 7.5	10.0 ± 8.2	0.3	-0.3	NS
Alemi ⁵⁹	1996	Addiction Severity Index—alcohol use score	>	28	0.2 ± 0.0	0.2 ± 0.3	0.0	25	0.1 ± 0.2	0.2 ± 0.2	0.1	-0.1	NS

Study	Year	Outcome	Desired Effect Direction ^b	Intervention				Control				Total Change (I - C)	Difference ^c
				No.	Baseline	Follow-up	Change	No.	Baseline	Follow-up	Change		
Alemi ⁵⁹	1996	Addiction Severity Index—drug use score	>	28	0.1 ± 0.1	0.1 ± 0.2	0.0	25	0.1 ± 0.1	0.1 ± 0.2	0.06	-0.01	NS
Alemi ⁵⁰	1996	Addiction Severity Index—alcohol use score	>	82	4.2	4.3	0.1	78	4.2	4.4	0.2	-0.1	NS
Alemi ⁵⁰	1996	Addiction Severity Index—drug use score	>	82	4.2	4.6	0.4	78	4.3	4.6	0.3	0.1	NS
Delichatsios ³⁸	2001	Food Frequency Questionnaire—global diet quality score	>	61	54.7	64.0	9.3	53	55.0	55.4	0.4	8.9	+
DeMolles ²⁵	2004	Sleep Symptom Checklist—summary score	<	15	23.7 ± 7.0	9.4 ± 6.0	-14.3	15	25.3 ± 9.1	13.4 ± 6.6	-11.9	-2.4	NS
DeMolles ²⁵	2004	Functional Outcomes of Sleep Scale—summary score	>	15	15.3 ± 3.5	18.1 ± 2.8	2.8	15	13.8 ± 4.6	17.0 ± 3.7	3.2	-0.4	NS
Pinto ³³	2002	Energy expenditure for moderate activity (kcal/kg/day)	>	112	1.5 ± 2.5	2.0 ± 3.7	0.5	131	2.0 ± 3.4	1.8 ± 2.6	-0.2	0.7	NS
Ershoff ²³	1999	Number of cigarettes per day	<	66	8.8 ± 8.8	7.3 ± 7.3	-1.5	61	8.6 ± 8.6	8.0 ± 8.0	-0.6	-0.9	NS
Ershoff ²³	1999	Number of quits of at least 24 hours	>	66		3.1 ± 3.8		61		3.9 ± 7.3		-0.8	NS
Brendryen ⁵²	2008	Repeated smoking abstinence at 1, 3, 6, and 12 months	>	197		22.3		199		13.1		9.2	+
Reid ³⁹	2007	Quit rates—smoking	>	50		46.0		49		34.7		11.3	NS
Mundt ⁴²	2006	Quit rates—alcoholism	>	16		88.0		18		72.0		16.0	NS
Ershoff ²³	1999	Quit for at least 1 week	>	66		18.2		61		16.4		1.8	NS
Ershoff ²³	1999	Quit for at least 24 hours	>	66		65.2		61		62.3		2.9	NS
Ershoff ²³	1999	Tried to quit during pregnancy	>	66		56.1		61		73.8		-17.7	NS
Helzer ²¹	2008	Weekly alcohol consumption	<	75		25.0 ± 1.4		81		18.3 ± 1.3		6.8	-
Patient process adherence (results are presented as mean ± SD)													
King ⁴⁹	2007	Physical activity recall questionnaire—days/week engaged in >30 minutes of moderate-intensity or more vigorous activity	>	61	1.1 ± 1.6	2.8 ± 2.5	1.7	62	1.2 ± 1.4	2.2 ± 2.0	1	0.7	+
King ⁴⁹	2007	Physical activity recall questionnaire—energy expenditure in moderate-intensity or more vigorous activity	>	61	0.8 ± 1.2	1.56 ± 1.4	0.76	62	0.95 ± 1.3	1.21 ± 1.2	0.26	0.5	+
King ⁴⁹	2007	Physical activity recall questionnaire—minutes of moderate-intensity or more vigorous activity	>	61	78.4 ± 113.3	157.3 ± 142.9	78.9	62	92.2 ± 126.7	118.4 ± 124.5	26.2	52.7	NS
Piette ²⁴	2001	Foot inspection	>	132	4.3 ± 1.2	4.6 ± 0.1	0.3	140	4.0 ± 1.5	4.4 ± 0.1	0.4	-0.1	-
Piette ²⁴	2001	Home glucose monitoring	>	132	4.4 ± 1.1	4.6 ± 0.1	0.2	140	4.4 ± 1.2	4.4 ± 0.1	0.0	0.2	+
Piette ²⁴	2001	Weight monitoring	>	132	2.2 ± 1.7	2.6 ± 0.1	0.4	140	2.3 ± 1.7	2.5 ± 0.1	0.2	0.2	NS
Piette ³²	2000	Foot inspection	>	124		4.7 ± 0.7		124		4.3 ± 1.3		0.4	+
Piette ³²	2000	Home glucose monitoring	>	124		4.2 ± 1.4		124		3.7 ± 1.7		0.5	+
Piette ³²	2000	Weight monitoring	>	124		2.1 ± 1.7		124		1.6 ± 1.6		0.5	+
Jarvis ³⁵	1997	Minutes walked per week	>	3	0.0	124.0	124.0	3	0.0	37.0	37.0	87.0	+
Jarvis ³⁵	1997	Minutes walked per week	>	3	15.0	139.0	124.0	4	15.0	65.0	50.0	74.0	+
Jarvis ³⁵	1997	Minutes walked per week	>	4	30.0	146.0	116.0	2	30.0	84.0	54.0	62.0	NS
Jarvis ³⁵	1997	Minutes walked per week	>	3	60.0	156.0	96.0	6	60.0	113.0	53.0	43.0	NS
Jarvis ³⁵	1997	Minutes walked per week	>	7	120.0	168.0	48.0	17	120.0	156.0	36.0	12.0	NS
Alemi ⁵⁹	1996	Number of calls to physician	<	28	0.3	0.15	-0.15	25	0.32	0.61	0.3	-0.45	+

Study	Year	Outcome	Desired Effect Direction ^b	Intervention				Control				Total Change (I – C)	Difference ^c
				No.	Baseline	Follow-up	Change	No.	Baseline	Follow-up	Change		
Alemi ⁵⁹	1996	Number of nonphysician visits	<	28	0.7	0.04	-0.66	25	0.28	0.48	0.2	-0.86	NS
Alemi ⁵⁹	1996	Number of physician visits	<	28	2.6	1.9	-0.7	25	2.7	3.13	0.43	-1.13	NS
Patient process adherence (results are presented as percentage of patients)													
Vollmer ⁴⁰	2006	Inhaler not used	>	456		8.3		461		7.4		0.9	NS
Vollmer ⁴⁰	2006	Inhaler usage every day, regardless of symptoms	>	456		58.3		461		63.1		-4.8	NS
Vollmer ⁴⁰	2006	Inhaler usage several times/week	>	456		10.3		461		7.6		2.7	NS
Vollmer ⁴⁰	2006	Inhaler used occasionally, when asthma worsens	>	456		10.8		461		12.8		-2.0	NS
Stuart ²⁷	2003	Medication adherence at 4 months	>	232		70.0		415		56.0		14.0	NS
Dubbert ⁴⁴	2002	Walked at least 20 minutes 3 days a week	>	62		42.0		60		25.0		17.0	+
Pinto ³³	2002	If participants met the Centers for Disease Control & Prevention criteria for moderate-intensity activity	>	110	9.3	20.5	11.2	131	12.8	16.8	4.0	7.2	NS
Strickclin ⁴⁵	2000	Exercised regularly	>	18		73.0		19		79.0		-6.0	NS
Strickclin ⁴⁵	2000	Medication adherence	>	18		100.0		19		100.0		0.0	NS
Alemi ⁵⁹	1996	If patients called their physician	<	28	17.9	11.5	-6.4	25	16.0	21.7	5.7	-12.1	NS
Alemi ⁵⁹	1996	If patients visited an outpatient clinic	<	28	32.1	8.0	-24.1	25	44.0	30.4	-13.6	-10.5	+
Alemi ⁵⁹	1996	If patients were seen by drug counselor	<	28	39.0	7.0	-32.0	25	36.0	26.0	-10.0	-22.0	NS
Leirer ⁵⁴	1989	Influenza vaccination adherence	>	68		11.8		65		1.5		10.3	NS

Abbreviations: BMI, body mass index; C, control; I, intervention; IVRS, interactive voice response system; NS, not significant.

^aResults are presented as mean ± SD unless otherwise indicated.

^bGreater than sign (>) indicates increase in outcome measure. Less than sign (<) indicates decrease in outcome measure.

^cPlus sign (+) significantly favors the intervention group. Minus sign (-) significantly favors the control group.

■ eAppendix E. Summary of Patient-Reported Quality-of-Life Outcomes

Study	Scale	Outcome	Intervention				Control				Total Change (I – C)	Difference ^b
			No.	Baseline	Follow-up	Change	No.	Baseline	Follow-up	Change		
Alemi ⁵⁹	General Health Status Index	Health perception score	28	3.3 ± 0.8	3.4 ± 0.7	0.1	25	3.0 ± 1.0	3.4 ± 0.9	0.4	-0.3	NS
Alemi ⁵⁹	General Health Status Index	Mental status score	28	4.3 ± 1.1	4.3 ± 1.0	0.0	25	4.5 ± 0.9	4.7 ± 0.6	0.2	-0.2	NS
Alemi ⁵⁹	General Health Status Index	Pain level score	28	3.4 ± 1.4	3.6 ± 1.1	0.2	25	3.7 ± 1.0	3.4 ± 1.0	-0.3	0.5	NS
Alemi ⁵⁹	General Health Status Index	Physical health score	28	4.4 ± 0.8	4.6 ± 0.7	0.2	25	4.2 ± 1.1	4.5 ± 0.7	0.3	-0.1	NS
Alemi ⁵⁹	General Health Status Index	Psychiatric status score	28	0.1 ± 0.2	0.2 ± 0.2	0.1	25	0.1 ± 0.1	0.2 ± 0.2	0.1	0.0	NS
Alemi ⁵⁹	General Health Status Index	Role functioning score	28	4.6 ± 0.9	4.9 ± 0.3	0.3	25	4.6 ± 1.1	4.5 ± 1.2	-0.1	0.4	NS
Alemi ⁵⁹	General Health Status Index	Social functioning score	28	4.3 ± 1.1	4.3 ± 1.0	0.0	25	4.5 ± 0.9	4.7 ± 0.6	0.2	-0.2	NS
Goulis ⁴⁸	SF-36	Bodily pain score	45	62.3 ± 33.6	49.6 ± 38.1	-12.7	77	56.3 ± 33.2	47.5 ± 34.3	-8.8	-3.9	NS
Goulis ⁴⁸	SF-36	General health score	45	60.0 ± 16.2	62.9 ± 20.8	2.9	77	60.9 ± 21.1	56.6 ± 20.9	-4.3	7.2	NS
Goulis ⁴⁸	SF-36	General mental health score	45	63.5 ± 21.3	55.5 ± 23.0	-8.0	77	55.2 ± 24.9	58.0 ± 21.6	2.8	-10.8	NS
Goulis ⁴⁸	SF-36	Limitations in physical activities due to health problems	45	60.6 ± 26.3	51.0 ± 48.2	-9.6	77	63.4 ± 26.1	53.6 ± 39.1	-9.8	0.2	NS
Goulis ⁴⁸	SF-36	Limitations in social activities due to physical or emotional problems	45	71.6 ± 20.8	64.4 ± 25.4	-7.2	77	61.5 ± 27.5	62.2 ± 27.6	0.7	-7.9	NS
Goulis ⁴⁸	SF-36	Limitations in usual role activities due to emotional problems	45	60.3 ± 41.2	39.7 ± 72.4	-20.6	77	59.3 ± 43.7	47.2 ± 56.6	-12.1	-8.5	NS
Goulis ⁴⁸	SF-36	Limitations in usual role activities due to physical problems	45	73.1 ± 37.4	50.0 ± 71.8	-23.1	77	54.2 ± 42.0	43.8 ± 59.9	-10.4	-12.7	NS
Goulis ⁴⁸	SF-36	Mental component score	45	45.9 ± 11.1	42.4 ± 12.4	-3.5	77	41.9 ± 13.1	43.3 ± 10.1	1.4	-4.9	NS
Goulis ⁴⁸	SF-36	Physical component score	45	44.0 ± 10.2	40.7 ± 17.5	-3.3	77	43.0 ± 10.5	38.7 ± 15.2	-4.3	1.0	NS
Goulis ⁴⁸	SF-36	Vitality score	45	57.3 ± 20.9	58.8 ± 17.0	1.5	77	50.5 ± 25.4	53.3 ± 20.8	2.8	-1.3	NS
Goulis ⁴⁸	Visual Analog Scale of European QoL	Summary score	45	66.2 ± 20.4	70.7 ± 15.0	4.5	77	72.7 ± 21.8	72.1 ± 16.3	-0.6	5.1	NS
Naylor ⁵¹	SF-36	Mental component score	26	46.0 ± 10.6	48.8 ± 14.9	2.8	25	40.7 ± 9.5	38.9 ± 12.1	-1.8	4.6	+
Naylor ⁵¹	SF-36	Physical component score	26	32.7 ± 7.6	37.4 ± 6.7	4.7	25	30.9 ± 4.4	30.6 ± 7.7	-0.3	5	+
Greist ²²	Work and Social Adjustment Scale	Summary score ^c	74	20.7 ± 7.9	15.7 ± 8.5	-5.0	75	21.8 ± 7.6	19.8 ± 8.1	-2.0	-3.0	+
Nakagawa ⁶¹	Work and Social Adjustment Scale	Summary score ^c	21	21.0 ± 7.2	17.0 ± 8.1	-4.0	20	22.0 ± 6.1	15.0 ± 8.1	-7.0	3.0	NS

Abbreviations: C, control; I, intervention; NS, not significant; QoL, quality of life; SF-36, 36-item short-form health survey.

^aResults are presented as mean ± SD.

^bPlus sign (+) significantly favors the intervention group. Minus sign (-) significantly favors the control group.

^cDesired effect direction for these outcomes is a decrease.