Supplementary Online Content 3

Schmidt K, Worrack S, Von Korff M, et al. Effect of a primary care management intervention on mental health–related quality of life among survivors of sepsis: a randomized clinical trial. *JAMA*. doi:10.1001/jama.2016.7207.

This supplementary material has been provided by the authors to give readers additional information about their work.

eMethods

Patient clustering within PCP practice

The 291 randomized patients were cared for by 159 intervention PCPs (primary care physicians) and 148 control PCPs. Due to some PCP changes initiated by patients, the number of PCPs was slightly larger than the number of patients. Five PCPs took care of two patients in the same study arm. Nine PCPs took care of two patients in different study arms. Of these, 5 PCPs treated first a control and subsequently an intervention patient. 4 PCPs treated intervention patients first and control patients afterwards. In 3 of these cases, intervention patients died before PCP training could take place. All other participating practices treated only one patient. There was no patient shift between the groups. On the other hand, due to PCP changes, 16 patients were treated by two different PCPs, and one by as many as three PCPs (but under the same treatment conditions).

Distribution of intervention elements as PCP training, patient training and monitoring is displayed in eFigure 2.

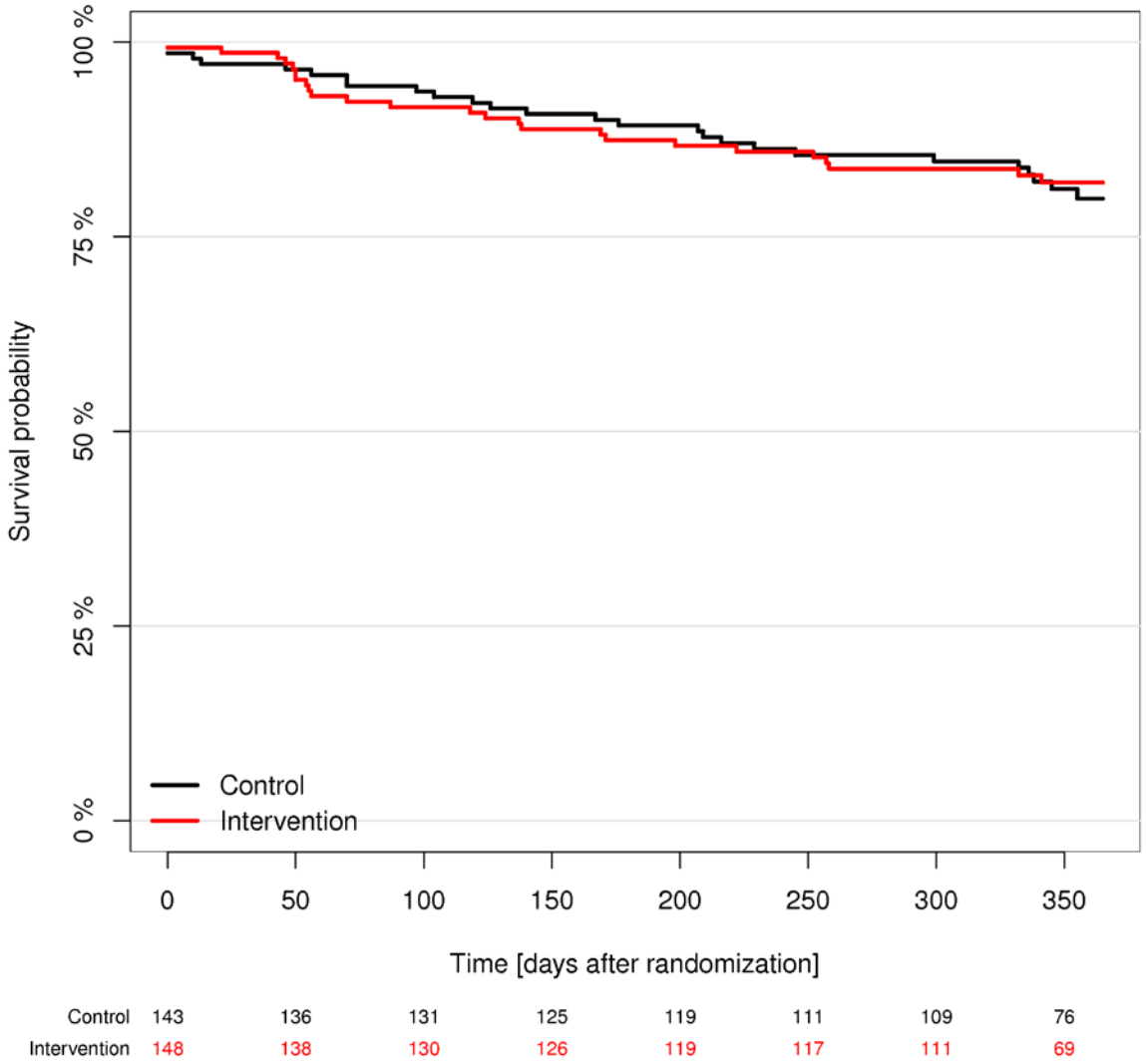
Potential clustering effects related to these observations were dealt with in sensitivity analyses of primary outcomes (eTable 6). In addition to the pre-specified confirmatory test (Welch's t-test, model I. in eTable 6) that addressed inter-group effects of change scores in the Mental Component Summary score (MCS) of the Short Form-36 Health Survey (SF-36) between ICU discharge and 6 months post-ICU, we ran six sensitivity analyses that addressed a possible clustering effect (models II.-VII.). Model II. is the linear mixed regression model. It is equivalent to a t-test but with an additional random effect (random intercept) for the PCP strata. Model II. was additionally adjusted for the covariate baseline MCS (model III.), and finally in model IV., the (pre-specified) adjustment set included age (linear), sex, ICU length of stay (LOS; linear), Charlson Comorbidity Index (linear), SF-36 PCS and MCS at baseline. Models IV.-V. are similar to models II.-IV. but limited to unique patient-PCP pairs (i.e. all patients that were treated by a PCP with more than one patient were excluded). All these sensitivity analyses robustly supported the claim of the confirmatory test – no evidence for a treatment group effect on the primary outcome.

Missing values and lost-to-follow up

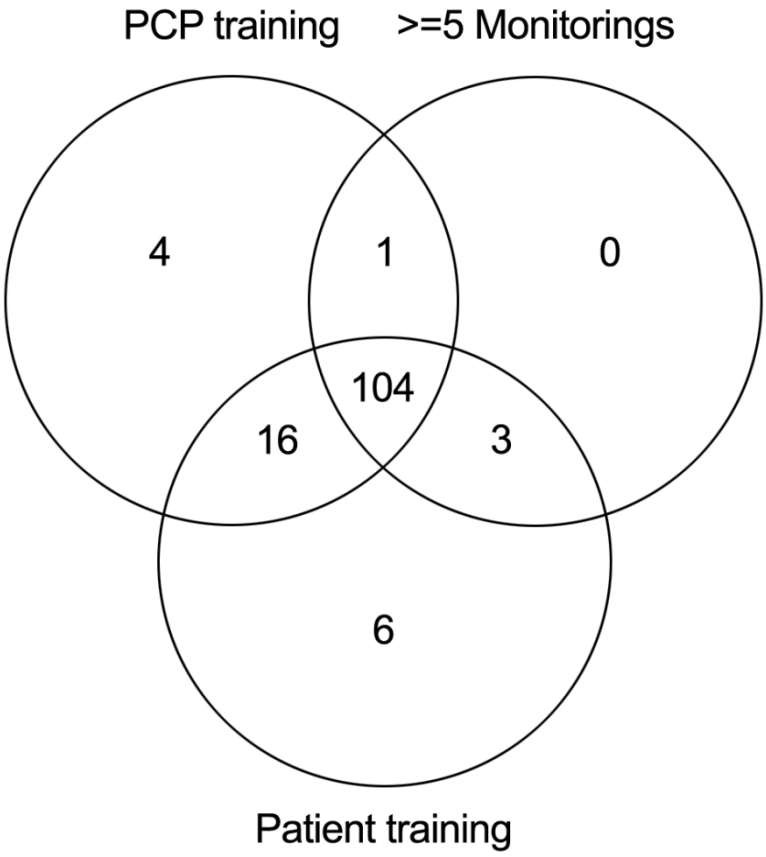
In the main text and in this supplement we report the numbers of missing values for each outcome analysis in a separate column (relative to the numbers provided in the flow-chart Figure 1).

To address the potential impact of missing values on the primary outcome analysis we performed two sensitivity analyses. First, we imputed missing change scores, using a standard linear model with outcome change scores, and ICU lengths of stay and Charlson comorbidity index values at baseline as predictors. Next, after imputing the missing change scores, we re-ran the same test used for the confirmatory analysis (model I in eTable 6) on all 291 patients; results are presented as model VIII. in eTable 6. We also employed a non-parametric method developed by Lachin (1999) that was designed to explicitly address possible missing observations (model IX. in eTable 6; for details regarding the method see reference).

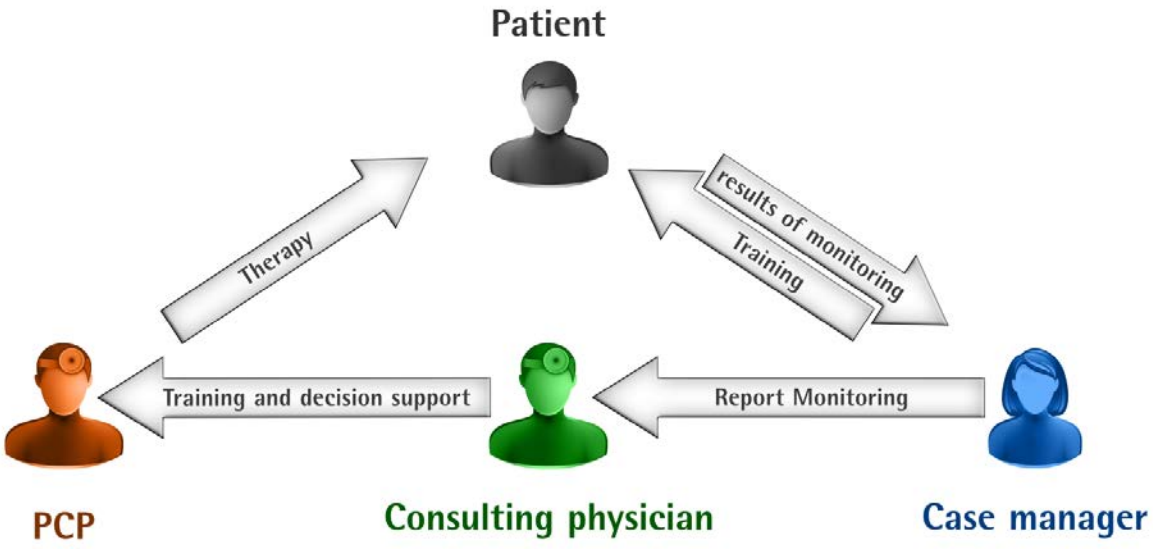
These two sensitivity analyses robustly supported the result of the confirmatory test – there was no evidence for a treatment group effect on the primary outcome.



eFigure 1. Secondary Outcome Analysis of Overall Survival. The figure shows the Kaplan–Meier estimates (without marks for censored observations) by treatment group. The x-Axis was truncated at the 1-year follow-up (365 days after randomization). The explorative P value of the Log-rank test was p=0.94.



eFigure 2. Venn Diagram of Intervention Delivery. The diagram shows the number of patients by treatment component i.e. patients who were treated by trained PCPs, received patient training and received five or more monitoring calls, respectively during the 12 month intervention period. Overlaps between these numbers are graphically presented – as an example 104 patients in the invention group experienced all three treatment components.



eFigure 3. Network and Functioning of Intervention Actors during the 12 month intervention period.

eTable 1. Primary Outcome Confirmatory Test and Sensitivity Analyses including clustering and missing value considerations for the primary outcome.

Model	Estimated treatment effect[a]	95% confidence interval[b]	*P* value (two-sided)
Confirmatory test			
I. Welch's t-test (two independent groups)	2.15	(-1.79;6.09)	.28
Explorative sensitivity analyses			
addressing clustering			
II. Linear mixed regression (LMR) with treatment effect and strata ICU[c]	2.15	(-1.77;6.07)	.28
III. LMR with treatment effect, baseline adjustment and strata ICU[c]	2.02	(-1.09;5.13)	.21
IV. LMR with treatment effect and adjustment for age (linear), sex, ICU LOS, Charlson Comorbidity Index, SF-36 PCS and MCS at baseline and strata ICU[c]	1.11	(-2.11;4.34)	.50
V. Model II. in unique patient-PCP pairs	1.69	(-2.26;5.63)	.40
VI. Model III. in unique patient-PCP pairs	1.64	(-1.51;4.79)	.31
VII. Model IV. in unique patient-PCP pairs	0.49	(-2.77;3.74)	.77
addressing missing values			
VIII. missing change scores imputed by ICU length of stay and Charlson comorbidity index – analysis like model I	1.40	(-1.47;4.26)	.34
IX. worst-rank analyses according to Lachin et al. (1999)	--[d]	--[d]	.23

[a] between-group difference in change scores, intervention vs. control; values larger than 0 indicate a benefit from the intervention; [b]Wald-type confidence intervals for the linear mixed models; [c]modeled as random intercept; [d]this non-parametric method does not provide parametric effect size estimates

eTable 2. Secondary Outcomes Analysis of All SF-36 Scales including the eight SF-36 subscales (vitality, physical functioning, physical role function, bodily pain, general health perceptions, social role function, emotional role function, mental health) between 6 or 12 months post-ICU and baseline are displayed as mean of the change scores ("Diff.") with standard deviations (SD) by group. The estimated treatment effect is provided as mean between-group difference with 95% confidence interval with the corresponding *P* value. All SF-36-scales ranged from 0 to 100 (high score indicates low impairment).

Follow-up	**Intervention** mean (SD)	**Control** mean (SD)	**NA (i; c)**[a]	**Estimated treatment effect** (95% CI)[b]	***P* value**[c]
Diff. SF-36 mental health component summary score					
12 months	3.7 (13.4)	2.3 (12.6)	9; 9	1.4 (-2.4;5.2)	.47
Diff. SF-36 physical health component summary score					
6 months	5.6 (13.1)	6.2 (12.3)	8; 11	-0.6 (-4.1;3.0)	.75
12 months	9.5 (12.3)	8.4 (13.5)	9; 9	1.1 (-2.7;4.9)	.56
Subscales					
Diff. SF-36 vitality					
6 months	15.7 (23.4)	10.4 (24.0)	0; 0	5.4 (-1.0;11.7)	.10
12 months	18.9 (22.1)	14.1 (25.8)	0; 0	4.8 (-1.9;11.5)	.16
Diff. SF-36 physical functioning					
6 months	34.1 (36.0)	28.9 (32.1)	3; 5	5.2 (-4.0;14.5)	.27
12 months	40.6 (34.7)	35.4 (35.1)	4; 2	5.2 (-4.7;15.1)	.30
Diff. SF-36 physical role function					
6 months	18.1 (39.3)	14.5 (39.0)	0; 0	3.6 (-6.8;14.0)	.50
12 months	28.0 (43.4)	16.8 (43.0)	0; 1	11.2 (-0.8;23.2)	.07
Diff. SF-36 bodily pain					
6 months	-2.7 (40.8)	6.7 (41.2)	2; 2	-9.4 (-20.4;1.6)	.09
12 months	7.1 (37.1)	13.4 (40.2)	2; 2	-6.3 (-17.2;4.6)	.26
Diff. SF-36 general health perceptions					
6 months	2.1 (20.3)	2.2 (20.9)	1; 2	-0.1 (-5.6;5.4)	.97
12 months	5.5 (23.4)	4.4 (22.5)	1; 2	1.1 (-5.3;7.6)	.73
Diff. SF-36 social role function					
6 months	-1.1 (33.1)	3.3 (38.3)	2; 1	-4.4 (-14.1;5.2)	.36
12 months	0.5 (33.4)	6.7 (38.9)	2; 2	-6.2 (-16.5;4.0)	.23
Diff. SF-36 emotional role function					
6 months	27.6 (55.2)	14.5 (55.2)	1; 1	13.2 (-1.6;27.9)	.08
12 months	27.4 (56.3)	19.6 (49.7)	1; 3	7.8 (-7.1;22.7)	.30
Diff. SF-36 mental health					
6 months	10.9 (21.3)	5.8 (24.9)	0; 0	3.1 (-1.0;11.3)	.10
12 months	12.8 (21.5)	7.1 (23.5)	0; 0	3.2 (-0.6;11.9)	.08

Abbreviations: SF-36, Short Form (36) Health Survey; NA, not available; i, intervention; c, control; CI, confidence interval; Diff., difference (change score)

[a]missing values for the particular outcome for the intervention (i) and control (c) of all available 112 intervention and 107 control patients available at 6 months or 107 intervention and 95 control patients available at 12 months; [b]mean between-group difference with 95% confidence interval; [c]two-sided from Welch's t-test

eTable 3. Secondary Outcomes Analysis of Measures of Mental Health. Change scores ("Diff.") of outcomes including depressive symptoms (MDI), PTSD symptoms (PTSS-10) and cognition (TICS-M) between 6 or 12 months post-ICU and baseline are displayed as mean with standard deviations (SD) by group. The estimated treatment effect is provided as mean between-group difference with 95% confidence interval with the corresponding *P* value.

Outcome at Follow-up	Intervention	Control	NA (i; c)[a]	Estimated treatment effect (95% CI)[b]	*P* value[c]
Diff. MDI; MDI ranged from 0 to 50[2]					
6 months	-6.9 (10.3)	-6.9 (10.7)	0; 1	-0.0 (-2.8;2.8)	.99
12 months	-8.8 (10.4)	-7.4 (11.7)	2; 0	-1.4 (-4.5;1.7)	.36
Diff. PTSS-10; PTSS-10 ranged from 10 to 70[2]					
6 months	-2.0 (11.0)	-0.2 (11.2)	0; 1	-1.8 (-4.8;1.2)	.24
12 months	-2.1 (12.9)	0.2 (10.9)	1; 0	-2.3 (-5.6;1.0)	.17
Diff. TICS-M; TICS-M ranged from 0 to 50[1]					
6 months	0.4 (3.9)	0.7 (4.0)	1; 1	-0.3 (-1.3;0.8)	.63
12 months	0.8 (4.1)	1.3 (4.5)	1; 0	-0.5 (-1.7;0.7)	.39

Abbreviations: MDI, Major Depression Inventory; PTSS, Post-Traumatic Symptom Scale; TICS-M, modified Telephone Interview for Cognitive Status; NA, not available; i, intervention; c, control; CI, confidence interval; Diff., difference (change score)

[a]missing values for the particular outcome for the intervention (i) and control (c) of all available 112 intervention and 107 control patients available at 6 months or 108 intervention and 97 control patients available at 12 months; [b]mean between-group difference with 95% confidence interval; [c]two-sided from Welch's t-test

[1]high score indicates low impairment; [2]high score indicates high impairment

eTable 4. Secondary Outcomes Analysis of Patient-Reported Functional Measures including activities of daily living (ADL), physical function (XSMFA-F) and disability (XSMFA-B), neuropathic symptoms (NSS), chronic pain (GCPS), malnutrition (MUST), Body-Mass-Index (BMI) and insomnia (RIS) between 6 or 12 months post-ICU and baseline or at 6 or 12 months are displayed as mean or median (change) scores with standard deviations (SD) or [Q1;Q3] by group. The estimated treatment effect is provided as mean between-group difference with 95% confidence interval; note that the corresponding *P* value is sometimes provided for the non-parametric test (corresponding to the descriptive summary statistics). Change scores are abbreviated with "Diff." in the first column.

Outcome at Follow-up	Intervention	Control	NA (i; c)[a]	Estimated treatment effect (95% CI)[b]	*P* value
ADL, median [Q1;Q3]; range 0-11[1]					
6 months	10 [7;11]	8 [6;11]	0; 0	1.0 (0.2;1.8)	.03[c]
12 months	10 [8;11]	10 [6;11]	2; 0	0.9 (0.0;1.7)	.05[c]
XSMFA-F, median [Q1;Q3]; range 0-100[2]					
6 months	31 [12;58]	46 [17;76]	0; 0	-8.9 (-17.0;-0.7)	.04[c]
12 months	17 [6;54]	36 [9;61]	2; 1	-6.8 (-15.0;1.5)	.15[c]
XSMFA-B, median [Q1;Q3]; range 0-100[2]					
6 months	38 [12;69]	56 [25;81]	0; 0	-9.9 (-18.5;-1.2)	.03[c]
12 months	25 [6;50]	38 [11;69]	2; 3	-8.6 (-17.2;0.1)	.06[c]
Diff. NSS, mean (SD); NSS range 0 to 10[2]					
6 months	0.6 (3.3)	0.6 (3.4)	0; 2	0.0 (-0.9;0.9)	.98[d]
12 months	0.9 (3.5)	0.7 (3.5)	2; 5	0.1 (-0.8;1.1)	.77[d]
Diff. GCPS-DS, mean (SD); GCPS-DS range 0 to 100[2]					
6 months	-8.0 (36.9)	-5.6 (40.5)	5; 2	-2.4 (-12.9;8.1)	.65[d]
12 months	-14.8 (34.0)	-7.6 (37.1)	5; 2	-7.2 (-17.3;2.8)	.16[d]
Diff. GCPS-PI, mean (SD); GCPS-PI range 0 to 100[2]					
6 months	-6.8 (23.7)	-7.7 (27.9)	2; 1	1.0 (-6.0;7.9)	.78[d]
12 months	-11.7 (22.1)	-9.6 (28.9)	4; 1	-2.1 (-9.4;5.2)	.57[d]
MUST >low risk, N (%)					
6 months	8 (7.3)	9 (8.8)	3; 4	0.8(0.3;2.5)[f]	.80[e]
12 months	5 (4.7)	6 (6.4)	1; 1	0.7(0.2;3.0)[f]	.76[e]
Diff. BMI, kg/m^2, mean (SD); BMI range 9 to 46[1,2]					
6 months	-0.1(3.5)	-0.8 (3.4)	5; 8	0.7 (-0.2;1.7)	.14[d]
12 months	1.0 (3.1)	0.3 (3.5)	3; 5	0.6 (-0.3;1.6)	.19[d]
RIS, median [Q1;Q3]; range 0-40[2]					
6 months	10 [7;14]	11 [7;18]	0; 0	-1.9 (-3.7;-0.1)	.14[c]
12 months	9 [6;13]	12 [7;15]	1; 0	-1.8 (-3.5;-0.1)	.03[c]

Abbreviations: ADL, Activities of Daily Living; BMI, Body Mass Index; GCPS DS, Graded Chronic Pain Scale Disability Score; GCPS PI, Graded Chronic Pain Scale Pain Intensity; MUST, Malnutrition Universal Screening Tool; NSS, Neuropathic Symptom Score; RIS, Regensburg Insomnia Scale; XSMFA-F, Short Musculoskeletal Function Assessment physical function; XSMFA-B Short Musculoskeletal Function Assessment disability; NA, not available; i, intervention; c, control; CI, confidence interval; Diff., difference (change score)

[a]missing values for the particular outcome for the intervention (i) and control (c) of all available 112 intervention and 107 control patients available at 6 months or 107 intervention and 95 control patients available at 12 months; [b]mean between-group difference with 95% confidence interval (may not correspond to the non-parametric P value); [c]two-sided from Wilcoxon-Mann-Whitney test; [d]two-sided from Welch's t-test; [e]Fisher's exact test; [f]estimated odds ratio

[1]high score indicates low impairment; [2]high score indicates high impairment

eTable 5. Secondary Outcomes Analysis of Measures of Patient-Reported Process-Related Measures including patient assessment of chronic illness care (PACIC), a drug use screening tool (KFM) and medication adherence (MMS) between 6 or 12 months post-ICU and baseline or at 6 or 12 months are displayed as mean or median (change) scores with standard deviations (SD) or [Q1;Q3] by group. The estimated treatment effect is provided as mean between-group difference with 95% confidence interval; note that the corresponding *P* value is sometimes provided for the non-parametric test (corresponding to the descriptive summary statistics). Change scores are abbreviated with "Diff." in the first column.

Outcome at Follow-up	Intervention	Control	NA (i; c)[a]	Estimated treatment effect (95% CI)[b]	*P* value
Diff. PACIC, mean (SD); PACIC range 0 to 10[1]					
6 months	0.2 (2.5)	0.2 (2.5)	8; 7	0.0 (-0.7;0.7)	.96[c]
12 months	0.0 (2.4)	-0.1 (2.7)	9; 4	0.1 (-0.7;0.8)	.86[c]
KFM, median [Q1;Q3]; KFM range 0 to12[2]					
6 months	3 [1;4]	3 [1;6]	3; 2	0.0 (-0.7;0.7)	.10[d]
12 months	3 [1;5]	3 [1;5]	3; 2	0.1 (-0.7;0.8)	.78[d]
Diff. MMS, mean (SD); MMS range 0 to 16[3]					
6 months	-0.3 (2.3)	-0.1 (2.4)	5; 2	-0.2 (-0.8;0.5)	.59[c]
12 months	0.0 (2.4)	-0.3 (2.2)	7; 3	0.3 (-0.4;0.9)	.40[c]

Abbreviations: KFM, Short Form for Medication Use; MMS, Modified Morisky Scale[3]; PACIC, Patient Assessment of Chronic Illness Care questionnaire; NA, not available; i, intervention; c, control; CI, confidence interval; Diff., difference (change score)

[a]missing values for the particular outcome for the intervention (i) and control (c) of all available 112 intervention and 107 control patients available at 6 months or 107 intervention and 95 control patients available at 12 months; [b]mean between-group difference with 95% confidence interval (may not correspond to the non-parametric P value); [c]two-sided from Welch's t-test; [d]two-sided from Wilcoxon-Mann-Whitney test

[1]high score indicates high satisfaction to the practice; [2]high score indicates high medication usage; [3]high score indicates low medication adherence (sum across 4 Items with option ("never"(0), "rarely"(1), "sometimes"(2), "frequently"(3), "always"(4))

eTable 6. Baseline Data (at ICU Discharge) on Secondary Outcome Measures, derived from patient reported questionnaires, provided as mean scores with standard deviations (SD). Data on the MUST questionnaire are provided as number and percentages of individuals with a more than low risk (score>1).

Characteristic	Intervention (n = 148)	Control (n = 142)	NA (i; c)
Clinical Measures			
Depression			
MDI[c1], mean (SD)	18.4 (9.8)	17.8 (10.1)	3 ;6
PTSD			
PTSS-10[d1], mean (SD)	24.0 (11.0)	23.2 (9.7)	3 ;6
Cognition: TICS-M[cg2], mean (SD)	33.7 (3.4)	33.1 (3.9)	1; 0
Neuropathic symptoms			
NSS[e1] mean (SD)	3.6 (3.3)	3.7 (3.1)	4; 9
Pain			
Intensity: GCPS PI[f1] mean (SD)	43.7 (25.6)	43.9 (23.1)	5; 9
Disability: GCPS DS[f1] mean (SD)	36.0 (34.5)	36.4 (34.8)	7; 12
BMI[b12], mean (SD)	27.3 (6.0)	27.3 (5.9)	3; 9
MUST > low risk; N (%)	12 (8.3)	11 (8.3)	3; 9
Quality-of-Life Measures, mean (SD)			
HRQoL			
SF-36 PCS[f2]	25.9 (9.4)	24.7 (8.0)	12; 15
SF-36 MCS[f2]	48.8 (12.5)	49.2 (12.6)	12; 15
Subscales			
SF-36 vitality[f2]	33.2 (19.7)	35.1 (20.7)	3; 5
SF-36 physical functioning[f2]	13.1 (22.7)	10.4 (20.8)	6; 5
SF-36 physical role function[f2]	7.1 (19.7)	7.7 (21.6)	3; 5
SF-36 bodily pain[f2]	54.7 (37.8)	49.1 (34.9)	6; 7
SF-36 general health perceptions[f2]	40.6 (18.5)	43.2 (18.6)	4; 7
SF-36 social role function[f2]	78.9 (28.4)	70.7 (34.3)	5; 7
SF-36 emotional role function[f2]	50.5 (47.6)	53.2 (47.7)	4; 6
SF-36 mental health[f2]	58.2 (23.2)	60.7 (21.6)	3; 6
PACIC; mean (SD)[e3]	4.8 (2.5)	4.6 (2.6)	10; 11
Modified Morisky; mean (SD)[h4]	1.4(2.2)	1.5(2.2)	8; 8

Abbreviations: BMI, Body Mass Index; GCPS DS, Graded Chronic Pain Scale Disability Score; GCPS PI, Graded Chronic Pain Scale Pain Intensity; HRQoL, Health Related Quality Of Life; ICU, Intensive Care Unit, MDI, Major Depression Inventory; MUST, Malnutrition Universal Screening Tool; NA (i; c), Not Available (intervention; control); NSS, Neuropathic Symptom Score; PACIC, Patient Assessment of Chronic Illness Care; PTSD, Post Traumatic Stress Disorder; PTSS, Post-Traumatic Symptom Scale; SF-36 MCS, Short Form (36) Health Survey Mental Component Score; SF-36 PCS, Short Form (36) Health Survey Physical Component Score; TICS-M, modified Telephone Interview for Cognitive Status; NA, not available; i, intervention; c, control

Anchors: [1]high score indicates high impairment, [2]high score indicates low impairment; [3]high score indicates high satisfaction to the practice; [4]high score indicates low medication adherence

Ranges: [a]the range of possible scores is 0-37; [b]the range of possible scores is 9-46; [c]the range of possible scores is 0-50; [d]the range of possible scores is 10-70; [e]the range of possible scores is 0-10; [f]the range of possible scores is 0-100

[g]values only above 27 (inclusion criteria); [h]the range of possible sum scores is 0-16 (sum across 4 Items with option (“never”(0), “rarely”(1), “sometimes”(2), “frequently”(3), “always”(4))

eTable 7. Clinical Significance on Secondary Outcome Scales

Outcome	Instrument	Minimally Clinically Important Difference (MCID)	Reference
HRQoL	SF-36	5 points on the original scale is the minimum difference that can be regarded as clinically relevant according to the manual by Bullinger et al. This value was derived from a study by Stewart et al.	Bullinger[1], 1998; Stewart[2], 1989
Physical functioning	XSFMA F/B	In a study of Wollmerstedt et al. the XSFMA has been shown as sensitive to changes over time by yielding large group effect sizes. A difference of 10 points on a scale of 100 points was considered clinically relevant by our medical authors.	Wollmerstedt[3], 2006
Activities of daily living	ADL	Our medical authors said that on a scale with a maximum of 11 points, a change of about one point (i.e., one fewer ADL impairment) may be clinically meaningful.	Fonda[4], 2004
Sleep quality	RIS	RIS has been shown to be sensitive to change; the cut off for pathological insomnia is 12 points.	Crönlein[5], 2013
Depression	MDI	Diagnostic tool for depression; cut-off at 27 points. A change between scores for mild, moderate and severe depression may be of clinical relevance. Score ≥ 4 at and Score ≥ 3 at 2 of the first 3 + 2 or 3 of the last 7 Mild 2 of the first 3 + 4 of the last 7 moderate All of the first 3 + ≥5 of the last Items Severe	Olsen[6], 2003
PTSD	PTSS-10	Screening tool for PTSD; cut-off at 35 points; Scores above 23 are considered to be clinically relevant (oral report by the authors).	Stoll[7], 1999
Cognition	TICS-M	Screening instrument for cognitive impairment using a cut-off of 27 points;	Brandt[8], 1988
Assessment of care	PACIC	The PACIC reflects the patient's perspective but does not measure a classical patient-centered outcome: MCID is not applicable	Fan[9], 2015
Pain disability	GCPS	A change in scores may be clinically relevant: Grade 0: No TMD pain Grade I: Low intensity characteristic pain intensity < 50 Grade II : High intensity characteristic pain intensity > 50 Grade III: Moderately limiting (regardless of pain intensity) Grade IV: Severely limiting (regardless of pain intensity) Grade 0: No TMD pain Grade I: Low intensity characteristic pain intensity < 50 Grade II: Low disability < 3 disability points Grade III: High disability 3 to 4 disability points Grade IV: High disability 5 to 6 disability points	von Korff[10], 1992

Abbreviations: ADL, Activities of Daily Living; GCPS, Graded Chronic Pain Scale; HRQoL, Health related Quality of Life; MDI, Major Depression Inventory; PACIC, Patient Assessment of Chronic Illness Care questionnaire; PTSD, Post Traumatic Stress Disorder; PTSS, Post-Traumatic Symptom Scale; RIS, Regensburg Insomnia Scale; SF-36, Short Form (36) Health Survey; TICS-M, modified Telephone Interview for Cognitive Status; XSMFA-F/B, Short Musculoskeletal Function Assessment physical function/disability

eTable 8. Secondary Outcomes Analysis of Process-Related Measures Derived From the PCP Documentation included the number of PCP and specialist contacts, referrals to specialists, nursing level, inability to work, number of remedies and therapeutic aids, length of stay (LOS) in hospital and rehabilitation clinic between ICU discharge and 6 month or 6 and 12 months post-ICU are displayed as mean or median (change) scores with standard deviations (SD) or [Q1;Q3] by group. The estimated treatment effect is provided as mean between-group difference with 95% confidence interval; note that the corresponding *P* value is sometimes provided for the non-parametric test (corresponding to the descriptive summary statistics).

Outcome at Follow-up	Intervention	Control	NA (i; c)[a]	Estimated treatment effect (95% CI)[b]	*P* value
Days in hospital					
-6 months	2 [0;29]	8 [0;32]	13; 22	-2.5 (-13.8;8.9)	.26[c]
6-12 months	2 [0;16]	0 [0;8]	15; 20	3.6 (-1.6;8.8)	.16[c]
Days in rehabilitation clinic					
-6 months	0 [0;22]	0 [0;21]	10; 26	2.1 (-5.3;9.4)	.82[c]
6-12 months	0 [0;0]	0 [0;0]	45; 41	-1.4 (-14.8;12.0)	.87[c]
Number of days with inability to work					
-6 months	0 [0;152]	0 [0;109]	33; 44	-0.8 (-6.2;4.6)	.47[c]
6-12 months	0 [0;2]	0 [0;0]	35; 45	0.2 (-2.6;3.0)	.41[c]
Number of remedies and therapeutic aids					
-6 months	1 [0;2]	1 [0;2]	8; 21	-0.1 (-0.5;0.2)	.36[c]
6-12 months	1 [0;1]	1 [0;2]	12; 18	-0.1 (-0.5;0.2)	.45[c]
Nursing level >0, N patients (%)					
6 months	29 (26.1)	31 (32.0)	1; 10	0.8(0.4;1.4)[d]	.36[e]
12 months	26 (24.3)	32 (35.2)	0; 4	0.6(0.3;1.1)[d]	.12[e]
PCP contacts					
-6 months	7 [4;12]	8 [5;12]	10; 25	-0.6 (-2.9;1.7)	.26[c]
6-12 months	6 [5;11]	7 [5;11]	16; 21	-0.3 (-2.0;1.5)	.37[c]
Referrals to specialists					
-6 months	2 [1;4]	2 [1;4]	17; 28	-0.4 (-1.1;0.4)	.47[c]
6-12 months	2 [1;4]	2 [1;3]	21; 23	0.4 (-0.4;1.2)	.61[c]

Abbreviations: ICU, intensive care unit; PCP, primary care physician; NA, not available; i, intervention; c, control; CI, confidence interval

[a]missing values for the particular outcome for the intervention (i) and control (c) of all available 112 intervention and 107 control patients available at 6 months or 107 intervention and 95 control patients available at 12 months; [b]mean between-group difference with 95% confidence interval (may not correspond to the non-parametric P value and may not be a good descriptor of the effect due to limited robustness against outliers); [c]two-sided from Wilcoxon-Mann-Whitney test; [d]estimated odds ratio; [e]Fisher's exact test

eTable 9. PCP Evaluation by Patients Derived From Items of the Patient Assessment of Chronic Illness Care questionnaire (PACIC) at 6 and 12 month, assessed as number and percentage of individuals with a Likert rating of > 5 of 10 points.

Items on PCP-supportiveness	Intervention (n = 148)	Control (n = 142)
Given choices about treatment to think about (211)		
6 months (n(i) = 110; n(c)=101)	44 (40.0)	31 (30.7)
12 months (n(i) = 106; n(c)=93)	37 (34.9)	33 (35.5)
Satisfied that my care was well organized (214)		
6 months (n(i) = 110; n(c)=104)	96 (87.3)	83 (79.8)
12 months (n(i) = 105; n(c)=93)	90 (85.7)	75 (80.6)
Helped to set specific goals to improve my eating or exercise (212)		
6 months (n(i) = 109; n(c)=103)	55 (50.5)	50 (48.5)
12 months (n(i) = 104; n(c)=92)	62 (59.6)	45 (48.9)
Given copy of my treatment plan (214)		
6 months (n(i) = 110; n(c)=104)	72 (65.5)	65 (62.5)
12 months (n(i) = 104; n(c)=91)	70 (67.3)	55 (60.4)
Encouraged to go to a specific group or class to help me cope with, my chronic condition (214)		
6 months (n(i) = 110; n(c)=104)	24 (21.8)	14 (13.5)
12 months (n(i) = 102; n(c)=93)	17 (16.7)	15 (16.1)
Asked questions, either directly or on a survey, about my health habits (214)		
6 months (n(i) = 110; n(c)=104)	88 (80.0)	70 (67.3)
12 months (n(i) = 102; n(c)=93)	75 (73.5)	62 (66.7)
Helped to make a treatment plan that I could carry out in my daily life (212)		
6 months (n(i) = 109; n(c)=103)	34 (31.2)	35 (34.0)
12 months (n(i) = 103; n(c)=92)	34 (33.0)	27 (29.3)
Helped to plan ahead so I could take care of my condition even in hard times (211)		
6 months (n(i) = 109; n(c)=102)	31 (28.4)	28 (27.5)
12 months (n(i) = 102; n(c)=91)	26 (25.5)	23 (25.3)
Asked how my chronic condition affects my life (214)		
6 months (n(i) = 110; n(c)=104)	39 (35.5)	35 (33.7)
12 months (n(i) = 104; n(c)=93)	35 (33.7)	35 (37.6)
Contacted after a visit to see how things were going (213)		
6 months (n(i) = 110; n(c)=103)	31 (28.2)	45 (43.7)
12 months (n(i) = 104; n(c)=93)	31 (29.8)	28 (30.1)
Told how my visits with other types of doctors, like an eye doctor or surgeon, helped my treatment (214)		
6 months (n(i) = 110; n(c)=104)	65 (59.1)	74 (71.2)
12 months (n(i) = 103; n(c)=93)	70 (68.0)	62 (66.7)
Overall satisfaction with chronic care (215)		
6 months (n(i) = 110; n(c)=105)	96 (87.3)	88 (83.8)
12 months (n(i) = 106; n(c)=93)	89 (84.0)	79 (84.9)

Abbreviations: i, intervention; c, control; PCP, primary care physician

eTable 10A. Topics of All Monitoring Calls Stratified by Clinical Urgency, provided as absolute frequencies (N) and (column) percentages (%). Data of all monitoring calls to all intervention patients during the 12 month intervention period are included, broken down to single topics and urgency stratifications using a traffic light scheme as described in the Manuscript (line 166-168). As an example "nutrition" was a topic in 708 calls and had an acceptable clinical status in 85.5% of these calls.

Nutrition	ENT symptoms[1]	Motoric function[2]	Pain intensity[3]	Neuro-pathic pain[3]	Cognition[4]	De-pression[5]	PTSD symp-toms[6]
[N=708]	[N=754]	[N=752]	[N=739]	[N=744]	[N=743]	[N=734]	[N=725]
Green = acceptable clinical status							
605 (85.5)	525 (69.6)	417 (55.5)	308 (41.7)	626 (84.1)	742 (99.9)	480 (65.4)	346 (47.7)
Yellow = intervention should be considered							
50 (7.1)	80 (10.6)	131 (17.4)	230 (31.1)	80 (10.8)	0 (0)	172 (23.4)	297 (41.0)
Red = immediate intervention recommended							
53 (7.5)	149 (19.8)	204 (27.1)	201 (27.2)	38 (5.1)	1 (0.13)	82 (11.2)	82 (11.3)

Abbreviations: ENT, Eye Nose Throat; PTSD, Posttraumatic stress disorder
1 Impairment of swallowing, hearing, smelling, as assessed by a 4-stepped Likert scale
2 as assessed by the **Pain Detect questionnaire** [11]
3 as assessed by the **Overall disability sum score (ODSS)** [12]
4 as assessed by the **6-item screener** [13]
5 as assessed by the **Patient Health Questionnaire (PHQ-9)** [14]
6 as assessed by the **7-item screener** [15]

eTable 10B. Monitoring Stratification on Patient Level - Patient-wise topics of the monitoring calls are shown with an immediate recommended intervention ("red" urgency stratifications using the traffic light scheme) during the 12 month intervention period, provided as absolute frequencies (N) and (column) percentages (%).

No. Of "red"	Nutrition	ENT symptoms[1]	Motoric function[2]	Pain intensity[3]	Neuro-pathic pain[3]	Cognition[4]	Depres-sion[5]	PTSD Symptoms[6]
0	103 (79.2)	85 (65.4)	79 (60.8)	68 (52.3)	112 (86.2)	129 (99.2)	94 (72.3)	88 (67.7)
1	15 (11.5)	16 (12.3)	13 (10)	15 (11.5)	9 (6.9)	1 (0.8)	18 (13.8)	18 (13.8)
2	6 (4.6)	7 (5.4)	8 (6.2)	15 (11.5)	4 (3.1)	0 (0)	9 (6.9)	14 (10.8)
3	2 (1.5)	0 (0)	2 (1.5)	9 (6.9)	3 (2.3)	0 (0)	3 (2.3)	1 (0.8)
4	2 (1.5)	9 (6.9)	6 (4.6)	7 (5.4)	1 (0.8)	0 (0)	0 (0)	3 (2.3)
5	1 (0.8)	3 (2.3)	4 (3.1)	6 (4.6)	0 (0)	0 (0)	3 (2.3)	1 (0.8)
6	0 (0)	4 (3.1)	7 (5.4)	3 (2.3)	0 (0)	0 (0)	0 (0)	1 (0.8)
7	1 (0.8)	4 (3.1)	5 (3.8)	3 (2.3)	0 (0)	0 (0)	2 (1.5)	3 (2.3)
8	0 (0)	2 (1.5)	6 (4.6)	4 (3.1)	1 (0.8)	0 (0)	1 (0.8)	1 (0.8)

Abbreviations: ENT, Eye Nose Throat; PTSD, Posttraumatic stress disorder
1 Impairment of swallowing, hearing, smelling, as assessed by a 4-stepped Likert scale
2 as assessed by the **Pain Detect questionnaire** [11]
3 as assessed by the **Overall disability sum score (ODSS)** [12]
4 as assessed by the **6-item screener** [13]
5 as assessed by the **Patient Health Questionnaire (PHQ-9)** [14]
6 as assessed by the **7-item screener** [15]

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