# E.1 Telemonitoring and in person follow up vs in person follow up – severe OSAHS

# Figure 2: Systolic blood pressure – morning

	Telemon	itoring+in	p. FU	In pers	on follov	v up		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Pepin 2019	130.98	18.47	157	130.06	17.53	149	72.1%	0.92 [-3.11, 4.95]	
Turino 2017	-4.3	14.8	52	-3.1	18	48	27.9%	-1.20 [-7.69, 5.29]	
Total (95% CI)			209			197	100.0%	0.33 [-3.10, 3.75]	+
Heterogeneity: Chi² = Test for overall effect:	•	• •	); I² = 0%						-20 -10 0 10 20 Favours Telemon.+ in p.FU Favours In person FU

#### Figure 3: Adherence – hours per day

	Telemo	nitoring+in	p. FU	In per	son follov	v up		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Anttalainen 2016	6.4	2.1	39	6.1	1.7	49	19.7%	0.30 [-0.51, 1.11]	
Fox 2012	3.1833	2.45	28	1.75	1.9666	26	15.3%	1.43 [0.25, 2.61]	<b>_</b>
Hoet 2017	5.7	1.6	21	4.2	1.9	20	16.5%	1.50 [0.42, 2.58]	_ <b></b>
Mendelson 2014	3.1	2.96666	40	4.1666	2.7666	42	14.7%	-1.07 [-2.31, 0.18]	
Stepnowsky 2007	4.1	1.8	20	2.8	2.2	20	14.6%	1.30 [0.05, 2.55]	
Turino 2017	5.1	2.1	52	4.9	2.2	48	19.3%	0.20 [-0.64, 1.04]	
Total (95% CI)			200			205	100.0%	0.60 [-0.12, 1.31]	•
Heterogeneity: Tau² =	0.50; Chi <sup>a</sup>	<sup>2</sup> = 14.04, df	= 5 (P = I	0.02); I <b>²</b> =	64%			_	
Test for overall effect:	Z=1.64 (F	P = 0.10)							-4 -2 0 2 4 Favours in P follow up Favours Telemonitoring+FU

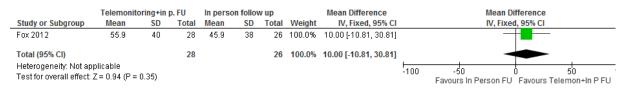
### Figure 4: Adherence – on nights PAP used – hours per day

	Telemon	itoring+in	p. FU	In per	son follov	w up		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Fox 2012	5.35	1.333	28	3.45	17.666	26	3.4%	1.90 [-4.91, 8.71]	•
Stepnowsky 2007	5	1.8	20	3.8	2.3	20	96.6%	1.20 [-0.08, 2.48]	
Total (95% CI)			48			46	100.0%	1.22 [-0.03, 2.48]	-
Heterogeneity: Chi² = Test for overall effect:	•	· ·	; I² = 0%						-4 -2 0 2 4 Favours in P FU Favours Telemonitoring+f

#### Figure 5: Mean % nights CPAP use >4 hours (adherence)

	Telemonit	oring+in	p. FU	In perso	on follov	N UP		Mean Difference		Mean D	)ifference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI		IV, Fixe	d, 95% Cl		
Stepnowsky 2007	52	27	20	37	34	20	100.0%	15.00 [-4.03, 34.03]					
Total (95% CI)			20			20	100.0%	15.00 [-4.03, 34.03]					
Heterogeneity: Not ap Test for overall effect:		0.12)							-100	-50 Favours In person FU	0 Favours Tel	50 emon+ln	100 P FU

#### Figure 6: Mean % days CPAP used (adherence)



## Figure 7: Quality of life – physical composite (change score), 0-100, higher is better

	Telemonit	oring+in	p. FU	In perso	on follov	v up		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Mendelson 2014	3.2	8.6	40	2.9	7	42	100.0%	0.30 [-3.10, 3.70]	
Total (95% CI)			40			42	100.0%	0.30 [-3.10, 3.70]	• • • •
Heterogeneity: Not ap Test for overall effect:		0.86)							-20 -10 0 10 20 Favours in P FU Favours Telemonitoring+f

#### Figure 8: Quality of life – mental composite (change score), 0-100, higher is better

	Telemoni	toring+in	p. FU	In perso	on follov	w up		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Mendelson 2014	1.6	10.9	40	1.6	8	42	100.0%	0.00 [-4.15, 4.15]	
<b>Total (95% CI)</b> Heterogeneity: Not ap Test for overall effect:		= 1.00)	40			42	100.0%	0.00 [-4.15, 4.15]	-20 -10 0 10 20 Favours In P FU Favours Telemonitoring+f

#### Figure 9: Quality of life – EQ5D, 0-1, higher is better

	Telemoni	toring+in	p. FU	In pers	on follov	w up		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	I IV, Fixed, 95% CI
Turino 2017	0.057	0.19	52	0.06	0.17	48	100.0%	-0.00 [-0.07, 0.07]	] –
Total (95% CI)			52			48	100.0%	-0.00 [-0.07, 0.07]	1 +
Heterogeneity: Not ap Test for overall effect:	•	= 0.93)							-2 -1 0 1 Favours In P FU Favours Telemonitoring+

#### Figure 10: Quality of life – GHQ12, 0-12, higher is worse

	Telemonit	toring+in	p. FU	In perso	on follov	w up		Mean Difference		Me	an Differer	ice	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI		IV	Fixed, 95%	CI	
Anttalainen 2016	5.1	6.1	39	4.9	5.8	49	100.0%	0.20 [-2.31, 2.71]					
<b>Total (95% CI)</b> Heterogeneity: Not ap Test for overall effect:		: 0.88)	39			49	100.0%	0.20 [-2.31, 2.71]	-20 Favours Te	-10 elemonitorine	g+FU Favo	10 Durs In P FU	20

#### Figure 11: Sleepiness (ESS), 0-24, higher is worse

	Telemonit	oring+in	p. FU	In pers	on follov	v up		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Anttalainen 2016	5.4	3.5	39	5.4	3.4	49	47.1%	0.00 [-1.45, 1.45]	+
Fox 2012	1.6	5.1	28	0.7	5.2	26	13.2%	0.90 [-1.85, 3.65]	_ <b>_</b>
Mendelson 2014	-2.3	4	40	-2.1	4.1	42	32.4%	-0.20 [-1.95, 1.55]	-+-
Stepnowsky 2007	9.2	6.6	20	9.9	5.2	20	7.3%	-0.70 [-4.38, 2.98]	
Total (95% CI)			127			137	100.0%	0.00 [-1.00, 1.00]	•
Heterogeneity: Chi² = Test for overall effect:			; I² = 0%						-20 -10 0 10 20 Favours Telemon.+in P FU Favours In person FU

# Figure 12: Apnoea-hypopnea index (AHI) events per hour (lower is better)

	Telemonit	oring+in	p. FU	In pers	on follov	w up		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Anttalainen 2016	1.3	1	39	3.2	3.8	49	38.1%	-1.90 [-3.01, -0.79]	
Fox 2012	4.7	3.8	28	6.6	4.8	26	31.5%	-1.90 [-4.22, 0.42]	
Stepnowsky 2007	7.9	4.1	20	5	4	20	30.4%	2.90 [0.39, 5.41]	
Total (95% CI)			87			95	100.0%	-0.44 [-3.21, 2.33]	•
Heterogeneity: Tau² = Test for overall effect:			= 2 (P = 1	0.002); I²	= 83%				-20 -10 0 10 20 Favours Telemon.+in p FU Favours In person FU

## Figure 13: Functional outcome of sleep, 5-20, higher is better

	Telemonit	toring+in	p. FU	In pers	on follo	w up		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weigh	t IV, Fixed, 95% Cl	IV, Fixed, 95% CI
Stepnowsky 2007	15.2	5	20	14.4	4.2	20	100.0%	0.80 [-2.06, 3.66]	
Total (95% CI)			20			20	100.0%	0.80 [-2.06, 3.66]	▲
Heterogeneity: Not a	pplicable								-20 -10 0 10 20
Test for overall effect	: Z = 0.55 (P =	= 0.58)							-20 -10 0 10 20 Favours Telemon.+in P. FU Favours In person FU
								ean Difference	Mean Difference
	Telemonito	oring+in p	. FU	In persor	1 TOILOW	up	M	ean Difference	Mean Difference
Study or Subgroup	Telemonito Mean	oring+in p SD		In persor Mean				IV, Fixed, 95% Cl	IV, Fixed, 95% Cl
Study or Subgroup Stepnowsky 2007		· ·				Total V	Veight I		
	Mean	SD .	Total	Mean	SD	Total V 20 1	Veight   00.0% (	IV, Fixed, 95% CI	
Stepnowsky 2007	Mean 15.2	SD .	Total 20	Mean	SD	Total V 20 1	Veight   00.0% (	IV, Fixed, 95% Cl D.80 [-2.06, 3.66]	