DIGITAL
BLOOD PRESSURE ADJUSTMENT

+ Significantly better therapeutic results

+ Considerable time savings for both, doctor and patient

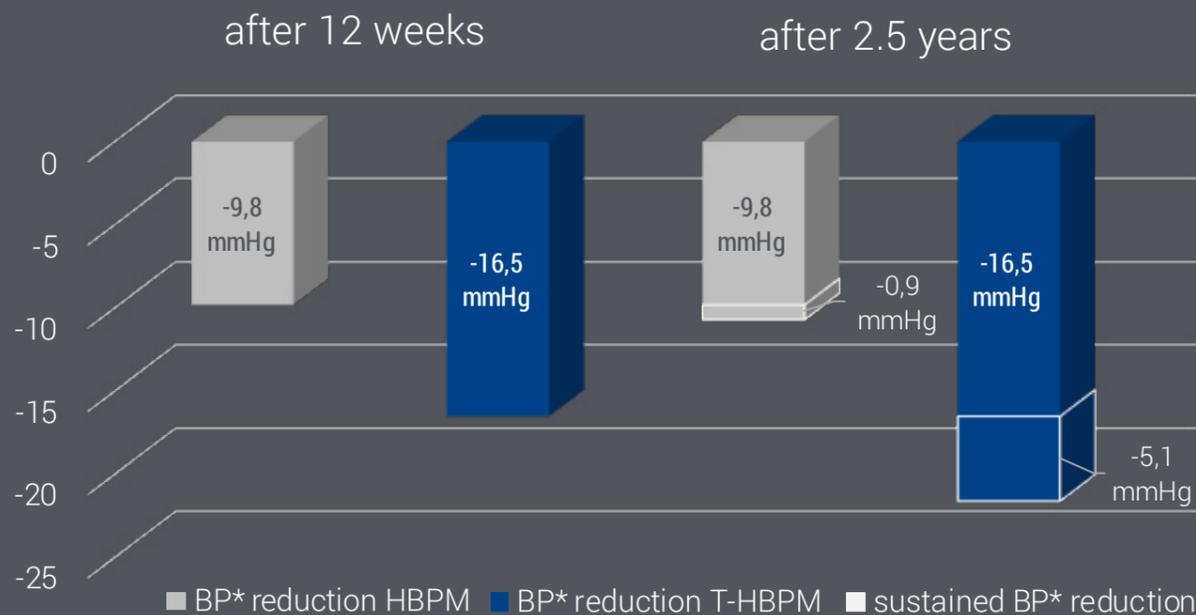**+** Therapy adjustment at a glance thanks to automatic status reports

Digital blood pressure adjustment

The treatment of hypertension is often very expensive and accompanied by a multitude of doctor's appointments. Telemedical home blood pressure monitoring has proven its value for superior therapy control and titration. The Tel-O-Graph® GSM, the most innovative blood pressure monitor on the market, transmits each blood pressure measurement securely and automatically from the patient to the doctor's office or clinic via an integrated SIM card. Its single-button operation is very straightforward. The doctor can get an overview of the course of therapy quickly and reliably anytime. The digital blood pressure control reduces the required number of doctor's visits and reduces the workload for the doctor, the medical assistant and the patient.

Your benefits

- Direct and automatic transmission of measured values due to an integrated GSM module
- Significant time savings due to automatic status reports
- Safe and easy operation
- Ultimate overall patient satisfaction
- High clinical/medical office reputation
- Direct and encrypted transmission of measured values from the patient to the Hypertension Management Software Client Server (HMS CS) and the office management system
- Complies with numerous international medical device standards, FDA approved
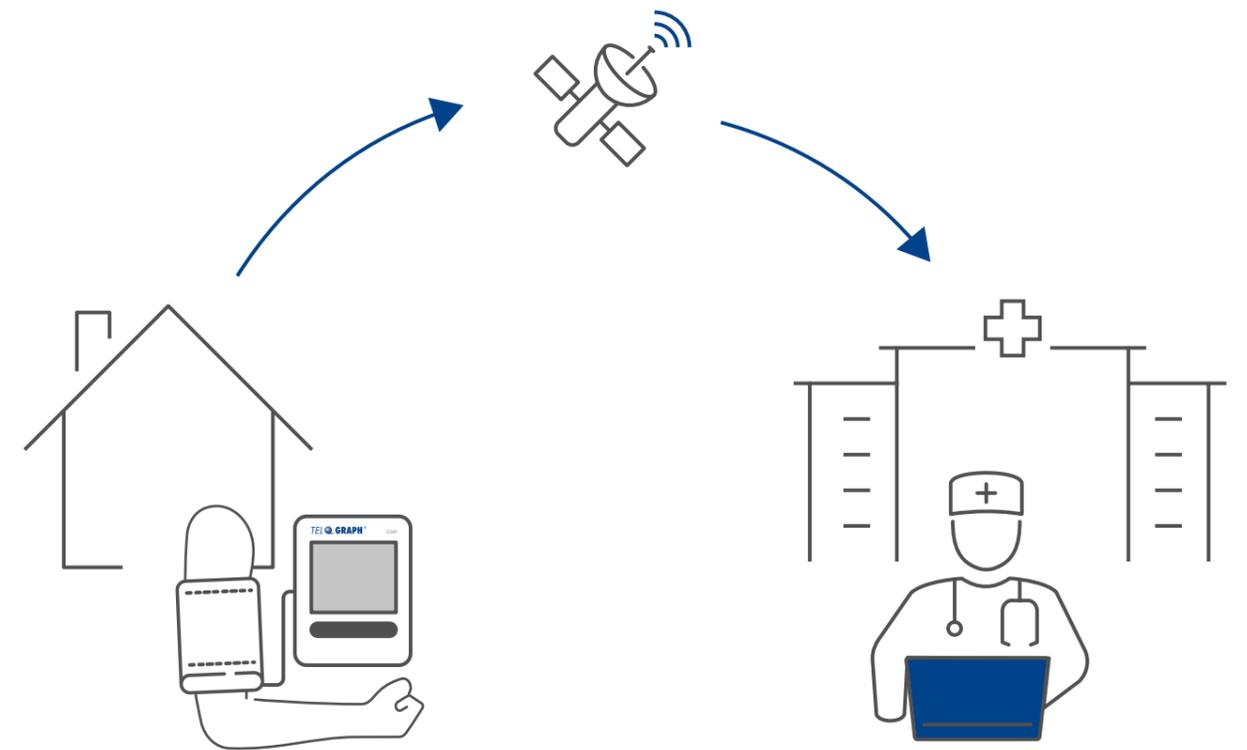
The clinical benefit

Based on proven advantages over HBPM this telemedical device contributes to achieving significantly higher BP reduction rates. Studies clearly show that a faster and more effective blood pressure setting and sustainably better treatment effects are possible. That is primarily due to the improved personal responsibility and patient compliance through the use of telemedicine. Blood pressure during telemetric home blood pressure monitoring (T-HBPM) dropped by 1.68 times more compared to conventional home blood pressure monitoring (HBPM) in the first 12 weeks. The sustained effect after 2.5 years was even more remarkable: the improvement in blood pressure by T-HBPM was 5.6 times higher than in HBPM.

Chart: BP reduction after 12 weeks and after 2.5 years

	after 12 weeks	after 2.5 years
BP* reduction HBPM	-9,8 mmHg	-9,8 mmHg
BP* reduction T-HBPM	-16,5 mmHg	-16,5 mmHg
sustained BP* reduction		-0,9 mmHg / -5,1 mmHg

Legend: ■ BP* reduction HBPM ■ BP* reduction T-HBPM ■ sustained BP* reduction

* systolic value
Source: Neumann CL, Menne J, Schettler V et al. Long-term effects of 3-month telemetric blood pressure intervention in patients with inadequately treated arterial hypertension. Telemed J E Health. 2015; 21(3):145-50

Hypertonie Management Software Client Server

The professional surrounding for telemedical data collection is the Hypertension Management Software (HMS CS), which has been used in medical practices for many years. The encrypted data transfer and HMS CS ensure safe handling of documents and trend analysis. The measured data can be transferred by GDT or HL-7 from the HMS CS to the office management software or the hospital's information system.

Automatic status reports

Compliance report:
Failure to agree with the agreed measuring frequency will result in automatic notification.

Weekly report:
A tabular and graphical overview of the measured values is generated once a week

Final report:
Automatic notification upon reaching the therapy goal.

Technical specifications: Tel-O-Graph® GSM

Size (LxWxH) and weight:	152 x 108 x 57 mm, 325 g
Measurement method:	Oscillometric
Validation:	BHS A/A Grading, ISO 81060-2:2013, AAMI SP 10
Measurement precision:	Blood pressure: ± 3 mmHg
	Pulse: ±2% or ±3 BPM (whichever value is higher)
Pressure measurement range:	Systolic 60-290 mmHg
	Diastolic 30-195 mmHg
Pulse measurement range:	30-240 BPM (beats per minute)
Operating temperature:	+5 bis +40 °C
Transport temperature:	-25 bis +70 °C
Storage temperature:	-25 bis +70 °C
Humidity, non-condensing (Operating, transport and storage): 15-93 %	
Battery capacity:	approx. 200
	(with 2 daily measurements by using high quality Alkaline batteries)
Bluetooth transfer:	Class 1
Frequency bands:	Five Bands UMTS (WCDMA/FDD):
	800, 850, 900, 1900 and 2100 MHz
	Quad Band GSM: 850, 900, 1800 and 1900 MHz,
	GSM, GPRS, EDGE, 3G, HSDPA
Memory capacity:	350 measurements
Power supply:	Batteries 4 x NiMH or LR6, AA
Regulatory standards:	IEC 60601-1:2012 (reprint), IEC 80601-2-30:2009 + ABD1:2013,
	MDD 93/42/EWG Class IIa, ISO 81060-2:2019, RED 2014/53/EU,
	DIN EN ISO 10993-5:2009, RoHS (2011/65/EU) und FCC Part15b

System requirements: HMS CS

Operating system:	Windows® 7, Windows® 8, Windows® 8.1, Windows® 10,
	(32-bit & 64-bit)
	Macintosh® OS X10.7.5 (64-bit),
	Linux® Ubuntu 14.04 (64-bit)
Processor:	Min. 1 GHz
Memory:	Min. 1 GB RAM
Available hard disk space:	Min. 200 MB
Internet access	

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