



The Slovak “Charter 70” Program: Implementing Population-Level BP Control



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Slovakia



Disclosures

- Employment

- National Cardiovascular Institute, Bratislava, Slovakia

- Cooperation with pharmaceutical companies

- Advisory board: Boehringer Ingelheim, Servier
- Speaker/consultant: AOP, Boehringer Ingelheim, MSD, Novo Nordisk, Servier, Viatrix

Why “Charter”?



- In Slovakia, the concept of a charter has historically symbolized a **collective commitment: a written pledge** that unites professionals, institutions, and society around a common goal.
- **“Charter 70”** represents a national initiative to achieve population-level blood pressure control, aiming for at least 70% of hypertensive patients to reach target values by the years 2023 and 2028, respectively.
- This historical inspiration gives the program both its name and its spirit: a shared responsibility across general practitioners, specialists, hospitals, and patients themselves, to reduce **cardiovascular risk and improve long-term outcomes**.

Slovakia

Hypertension profile

Total population (2024): 5 507 000

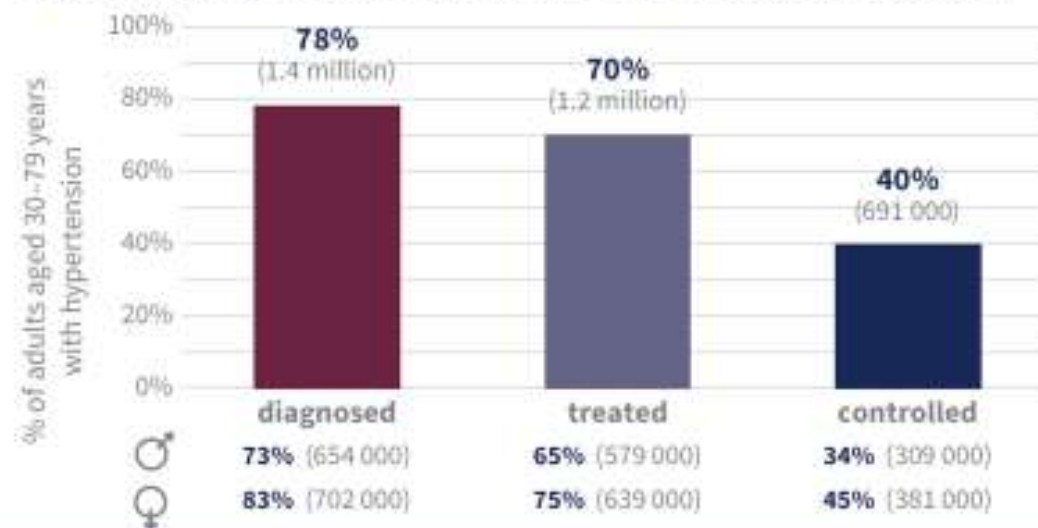
Prevalence of hypertension among adults aged 30–79 years (2024)^a

♂ 49% ♂ 52% ♀ 46%

Prevalence of hypertension (adults aged 30–79 years) – country comparison (both sexes)^a



Of the 1.7 million adults aged 30–79 years with hypertension, approximately 1.1 million do not have the condition controlled^b



Hypertension situation in Slovakia 2019



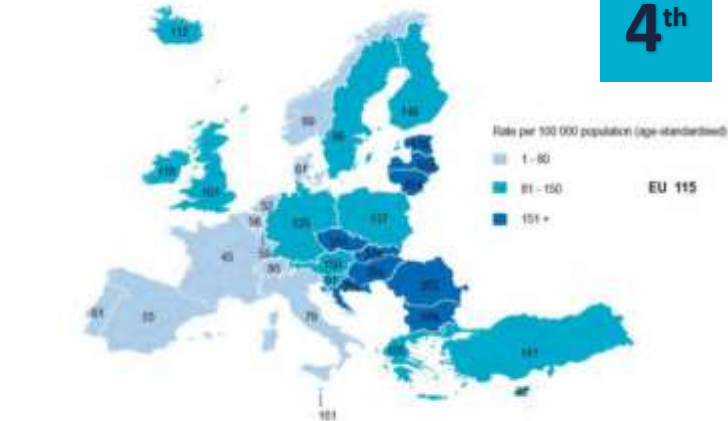
Slovakia belongs to countries with the highest mortality rates from **cardiovascular diseases** (1) which are also the **leading cause of mortality in Slovakia** (2)

• **1.35 millions** of diagnosed and treated patients with AH in Slovakia (3)

• **46%** of patients with **BP < 140/90 mm Hg** (4)

Figure 3.8. Ischaemic heart disease mortality, 2019 (or nearest year)

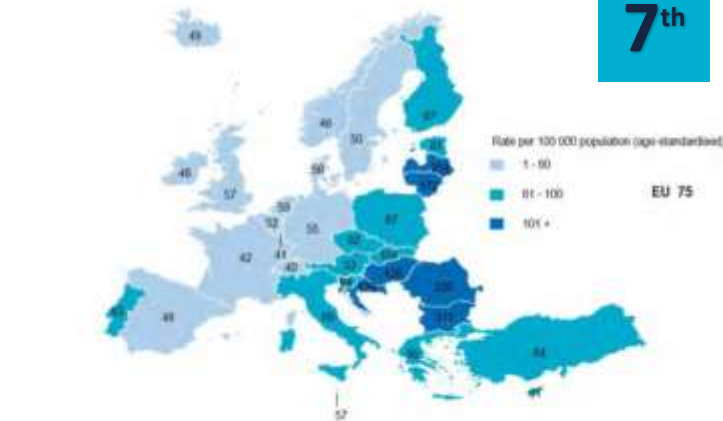
4th



Note: The EU average is weighted (using 2017 data for France). Source: Eurostat Database.

Figure 3.10. Stroke mortality, 2019 (or nearest year)

7th



Note: The EU average is weighted (using 2017 data for France). Source: Eurostat Database.

CV mortality & BP control

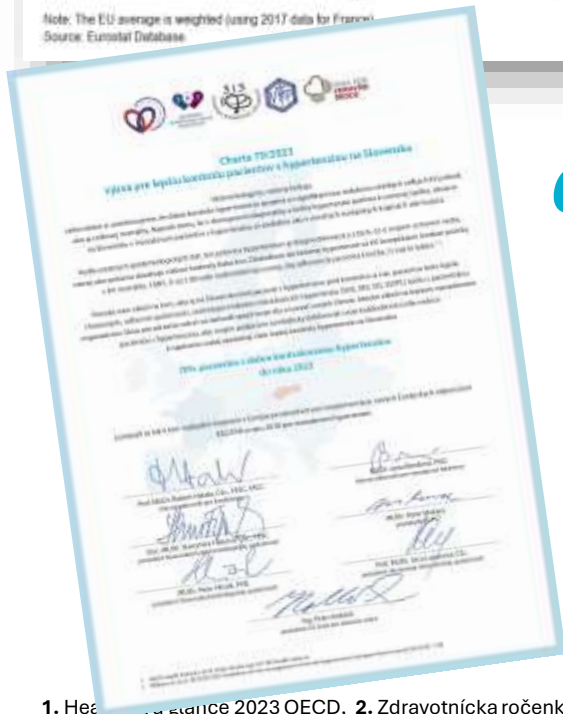


Charter 70/2023

Initiative of professional societies managing patients with hypertension and patient organization for **better control** of patients with hypertension in Slovakia

70% of patients with well-controlled hypertension by 2023

by implementing **2018 ESC/ESH Guidelines** into everyday clinical practice



1. Health Performance 2023 OECD, 2. Zdravotnícka ročenka 2022, 3. IQVIA 2020, 4. Hatala R, et al. Skrining artériovej hypertenzie u dospelých osôb pri návšteve ambulancie všeobecných lekárov na Slovensku – iniciatíva „Charta 70/2023“ Cardiology Lett. 2021;30(3-4):148–158, 5. <https://www.sks.sk/news/charta-702023>; Image created with Copilot AI

Počet kreditov ARS CME: 10
 Slovenská hypertenziologická spoločnosť SLS
 Slovenská spoločnosť všeobecného praktického lekárstva

CERTIFIKOVANÝ SEMINÁR
 Predoperačná príprava pacienta na nekardiálnu operáciu
 v rukách praktického lekára
 11. – 12. marec 2022
 hotel TURIEC, A. Sokolika 2, Martin
PROGRAM
www.hypertenzia.org
www.ssvpt.sk



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 a Slovenská spoločnosť všeobecného praktického lekárstva SLS

 Počet kreditov ARS CME: 11
PRVÝ CERTIFIKOVANÝ SEMINÁR
 Ambulantné monitorovanie krvného tlaku v praxi všeobecného lekára pre dospelých
 18. – 19. január 2020
 Hotel Elizabeth Trenčín
www.hypertenzia.org
www.ssvpt.sk

Počet kreditov ARS CME

 Slovenská hypertenziologická spoločnosť SLS
9. ŠKOLA HYPERTENZIE
 Slovenskej hypertenziologickej spoločnosti
 3. – 4. november 2023
 Dolný Kubín – Hotel Park

www.hypertenzia.org

Continuous training of physicians (GPs, specialists, hospitals)

Certified courses

- ABPM
- NCS for the patient with AH
- School of Hypertension

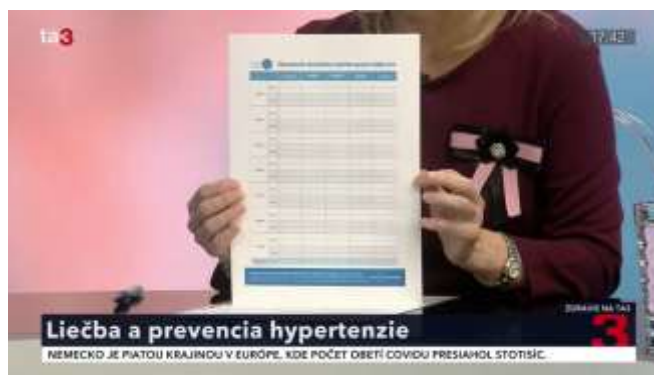
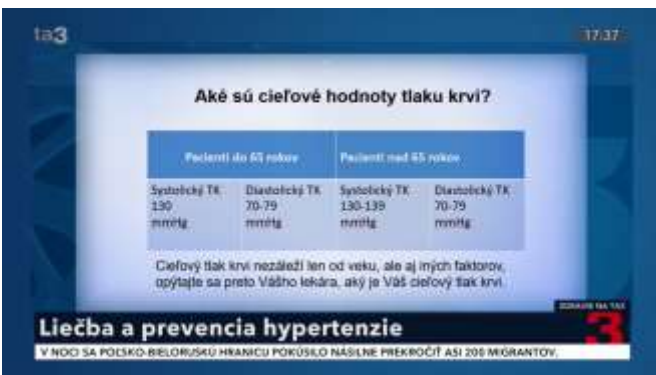


Raising public awareness about hypertension

AH screening / Education / Importance of good treatment adherence



- What are "good" and "bad" blood pressure values?
- What to do if I measure high blood pressure?
- How to measure blood pressure correctly at home.
- What are the complications of untreated or poorly treated hypertension?
- The importance of good adherence to the treatment.
- Screening activities.



Benefits for Patients first! Collaboration with Patients Organization



DISEASE AWARENESS

BP MEASUREMENT & DETECTION

EDUCATION → BETTER ADHERENCE

Public & Patients education → Increasing awareness and knowledge about AH for patients, public (diagnosis, proper BP measuring, risk factors, consequences of untreated AH, adherence....)



Screening activities → Screenings in public and BP measurements; detection of newly dg/ uncontrolled pts + education



Zámranník domáceho monitorovania tlaku krvi a srdcovej frekvencie

	Časovosť	Typ tlaku	Meranie	Stav pacienta	Príčina
1. mer.					
2. mer.					
3. mer.					
4. mer.					
5. mer.					
6. mer.					
7. mer.					

Ako správne merať tlak?

- Nezabudnite si umyť ruky pred meraním
- Udržujte ruky, nohy a chrbát priamo pod meraním
- Chodíte na točenie a 100, 100, 100, 100, 100, 100, 100, 100, 100, 100
- Možnosť nastaviť veľkosť píska
- Nezabudnite si umyť ruky po meraní
- Čiastka spravy a nastavenia
- Nezabudnite si umyť ruky po meraní
- Nezabudnite si umyť ruky po meraní

1. meranie a 1. meranie, presnosť: 2. meranie a 1. meranie, presnosť: 2. meranie a 1. meranie, presnosť: 2. meranie a 1. meranie, presnosť:



Holistic approach

Team based care – Nurses Involvement (first line contact with patients)

*The **KEY ROLE OF NURSES** in the long-term management of AH, especially education, support and follow-up of treated pts as the part of an overall strategy to **IMPROVE BP CONTROL and PATIENT` s ADHERENCE***

- „Care of adult patients with AH/ dyslipidemia“
- Proper **education of pts** towards desired change in behavior & lifestyle changes
- Motivating pts to the treatment regimen and building a good therapeutic habits → **improving adherence**



Team based care – Pharmacist Involvement (first line contact with patients)



Názov:

**Standard procedure for the prevention
of CV diseases in the Pharmacy
environment**

Autori:

PharmDr. Peter Matejka, PhD.

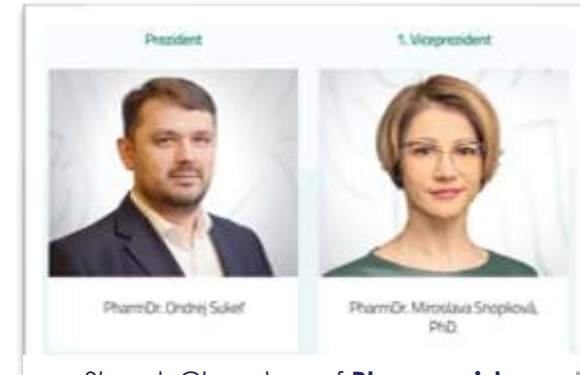
Mgr. Peter Jeník

PharmDr. Miroslava Snopková, PhD.

PharmDr. Ondrej Sukeľ

doc. MUDr. Štefan Farský, CSc., FESC

PharmDr. Anna Jauschová



- Proper **BP measurement techniques** training for pharmacists
- **MMM 2024** - cooperation with Slovak Chamber of Pharmacists
- Involvement of selected pharmacies into screening & educational activities during the **Health Festival 2024** in 24 cities



Holistic approach → BP measurement, AF detection and plethysmography + patient education

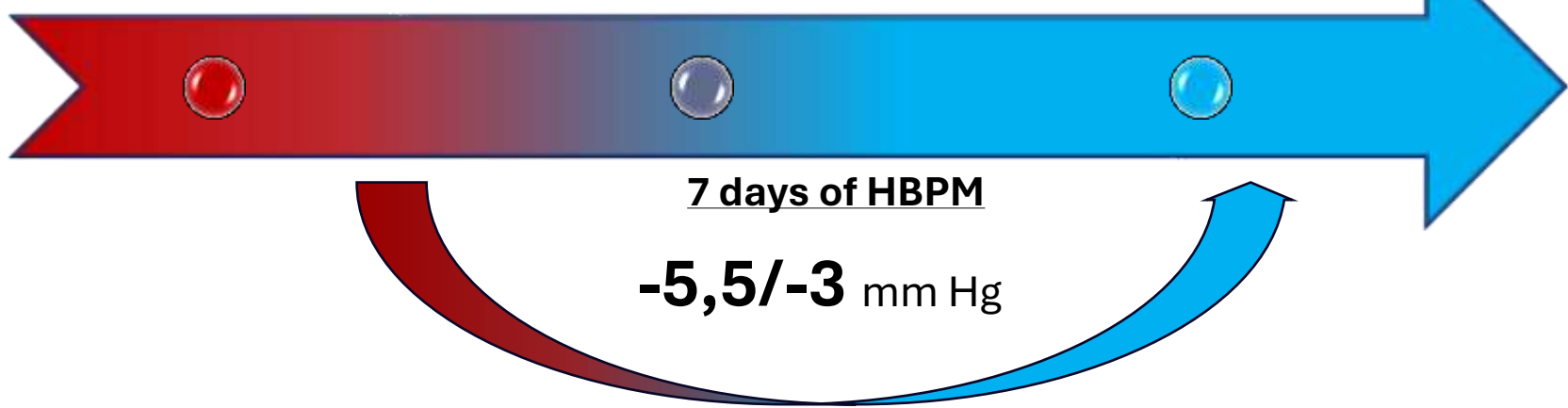
Home BP Monitoring contributed to better BP control in treated patients with AH in addition to education (HBPM 2023 screening in Slovakia)



1. Visit
Treatment optimization

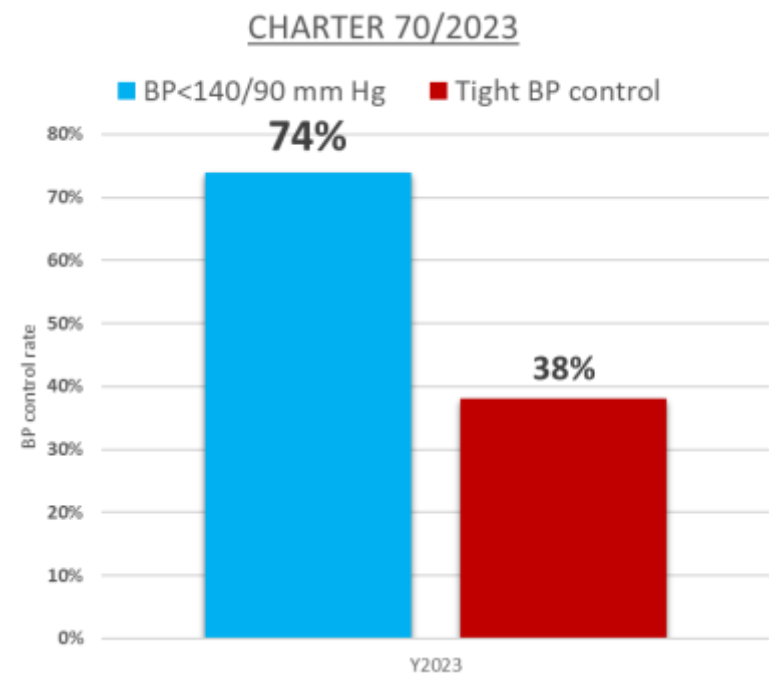
RR of not achieving target BP can be reduced **10-fold**

2. Visit
(+1 or 2 months)
Follow-up



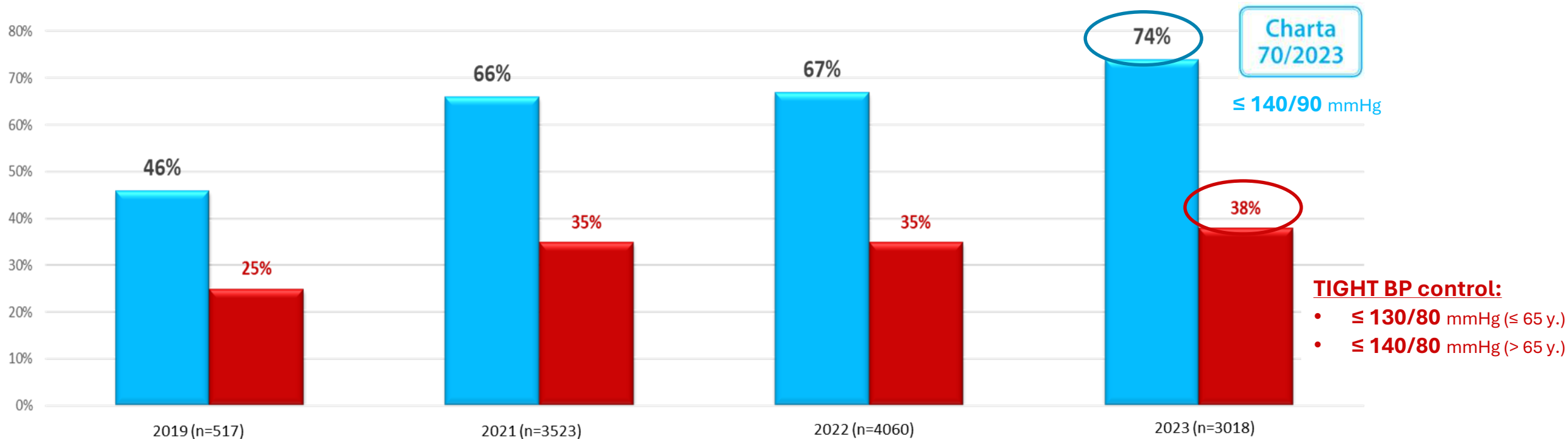
7 days of HBPM
-5,5/-3 mm Hg

+18,2 % HT Patients with BP \leq 140/90 mm Hg
+17 % HT Patients with Target BP age related*



Did CHARTER 70/2023 successfully achieve its Mission?

BP control improvement from 2019 – 2023



We know how to achieve this goal (proven on selected population)

56% of patients with BP < 140/90 mm Hg → **74%** after proper education & HBPM (4)

21% of patients with target BP in line with guidelines → **38%** after proper education & HBPM (4)

Systematic control of patients with AH

Charter 70/2028

A call for **systematic control** of patients with hypertension in Slovakia under the auspices of the Ministry of Health of the Slovak Republic

70% of patients with target BP values by 2028

by implementing 2023 ESH Guidelines into everyday clinical practice

SYSTEMATIC APPROACH

- Systematic control of all patients
- Systematic rationalization of pharmacotherapy
- Decrease clinical inertia & Increase therapeutic adherence

ALL SOCIETY PROJECT

- Under the patronage of the MoH
- 5 medical professional societies (SHS, SSVPL, SKS, SIS, SOA),
 - Nurses (SKSaPA), Pharmacists (SLeK),
 - Faculty of Medicine (LF UK),
- Patient organization (Union for a Healthier Heart)



How to Fulfill the Vision of the Charter 70/2028 Initiative



General Practitioner

- Early Diagnosis
- Proper BP measurement technique
- Patient engagement, including Home BP monitoring and ambulatory blood pressure monitoring
- Initiation of therapy with a fixed-dose dual combination
- Treatment intensification through titration and transition to a fixed-dose triple combination

Specialist

- Simultaneous management of multiple CV risk factors
- Patient education to ensure regular medication intake
- Improving adherence through the use of SPCs and polypills
- Uptitration of therapy as clinically required

Hospital

- Systematic rationalization of pharmacotherapy at the ward level
- Greater use of SPCs and polypills
- If a patient is initiated on an SPCC during hospitalization, continuation of long-term use is typically ensured



Awareness of such project can attract health authorities, but they need help to act



**Day of Health in the Slovak Parliament
CV disease –hypertension**



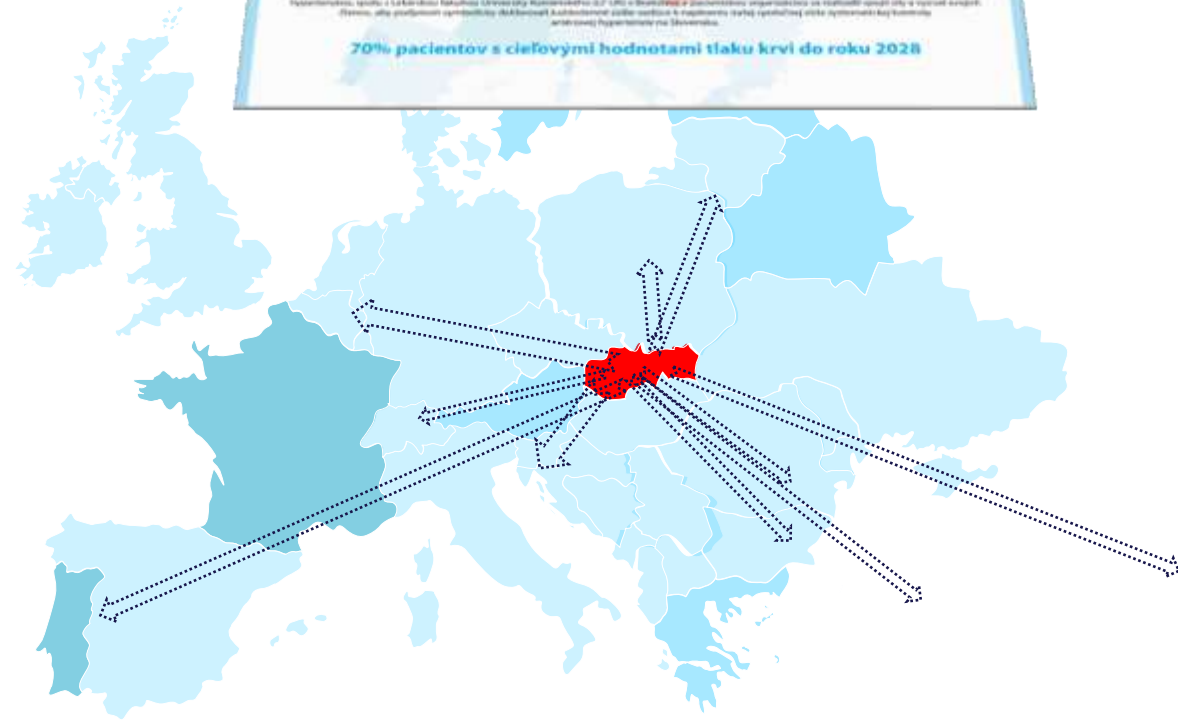
**Conference Visionairs
with Minister of Health
World Day of Hypertension**



**President of Slovak Republic
Support of Charter in social media**

From Slovakia to The World

inspiration for other countries and launch of similar projects



From Slovakia to... Portugal, Croatia, Slovenia, Belgium, Australia, Ukraine, Poland, Bulgaria, Georgia, Romania, Vietnam, Azerbaijan ...

Lessons From REALITY



Lessons from Reality

Steps Towards Improvement

Digitalized Management of Arterial Hypertension



E-Health Implementation in Slovakia

✓ Electronic Prescription, Dispensing, and Medication

- Gradual replacement of paper prescriptions with electronic alternatives.
- Offers support to doctors and pharmacists through accessible medication histories and expert databases (e.g., for monitoring drug interactions).
- Enables tracking of prescription dates and medication dispensing dates, ensuring better oversight and adherence.
- Enhances prescribing accuracy and medication safety.

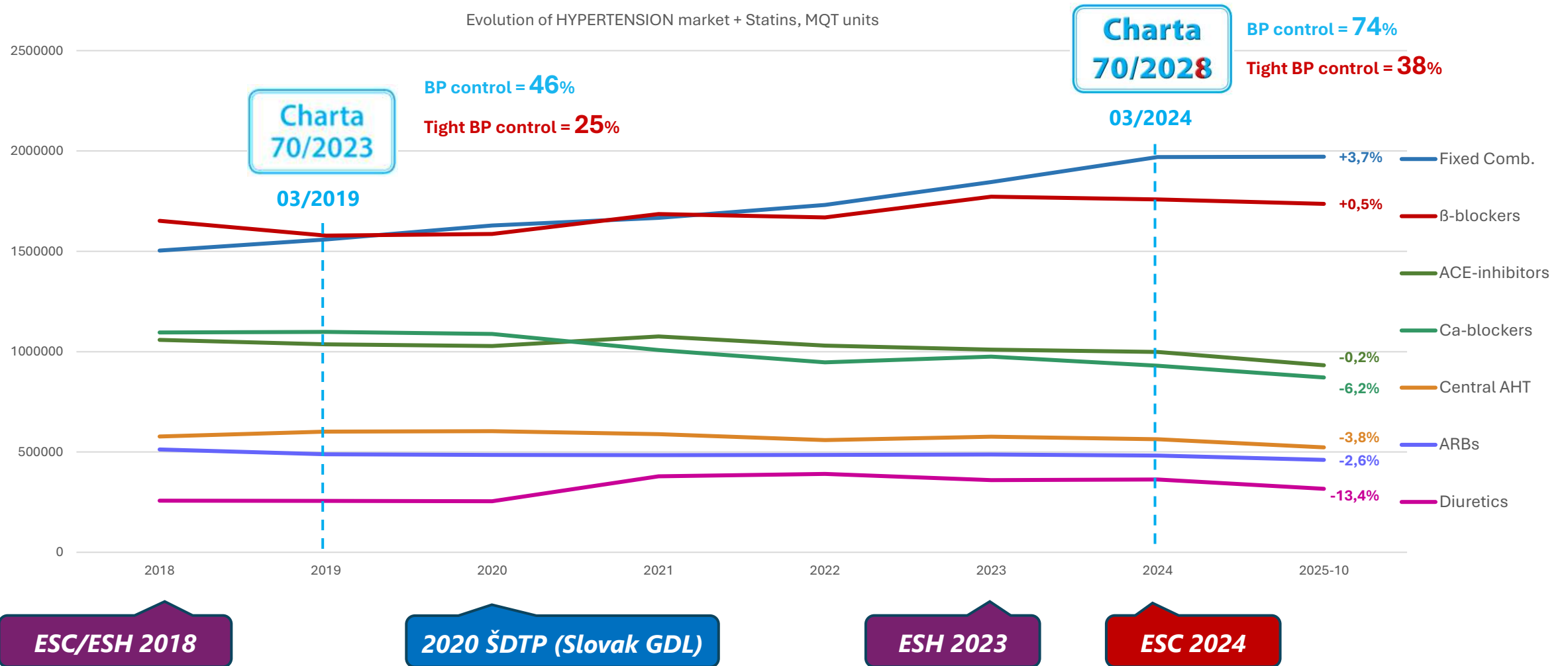
✓ Electronic Health Record

- Centralized access to the patient's medical history.
- Streamlines communication between healthcare providers.

✓ Insurance Companies

- Parameters to control GCP
- Bonus system

HYPERTENSION market in Slovakia and SPC evolution



1. IMS MAT/12 10/2025, PPG Y-1; 2. Hatala R, et al. Skrining artériovej hypertenzie u dospelých osôb pri návšteve ambulancie všeobecných lekárov na Slovensku – iniciatíva „Charta 70/2023“ *Cardiology Lett.* 2021;30(3-4):148-158, 3. Šimková, Vachulová: Charter 70/2023 – final summary of challenges aimed at implementing and optimizing blood pressure control in patients with arterial hypertension in Slovakia *Via pract.*, 2025;22(5):196-202 BP control BP control ($\leq 140/90$ mmHg), Tight BP control $\leq 130/80$ mmHg (≤ 65 y.) and $\leq 140/80$ mmHg (> 65 y.)

Lessons From the Past
and
Future Directions



Committed for Better Hypertension Management

Engagement of All Key Stakeholders:

Focus on Collective Efforts

PHYSICIANS (GP, INT, CAR)

Empowerment to adopt best practices and **GUIDELINES IMPLEMENTATION** in hypertension management.

NURSES

EDUCATION: correct technique for measuring BP, target BP and LDL-C levels, good adherence to treatment.

PHARMACISTS

Involvement in **screening activities (MMM) + EDUCATION**

PATIENTS

AWARENESS: hypertension management and good adherence to treatment, engagement and education

PARTNERS

Engagement of HICs, healthcare administrators, and policy makers to optimize the care pathway.

Building an integrated system to improve hypertension control rates.

Annual mobilization of resources, knowledge, and engagement to combat the challenges of chronic disease management (AH + DLP / CAD).

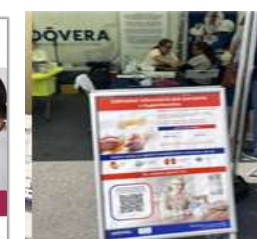
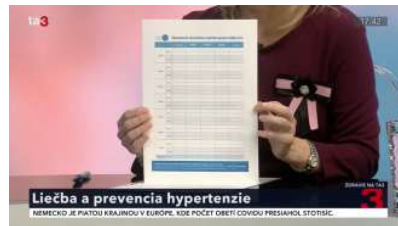


SYRAFA



telemon

MAY MEASURE MONTH



We can only achieve this goal by commitment and consistent implementation of guidelines into daily clinical practice AS ONE

Hospitalization is a good opportunity to implement Systematic Rationalization of Pharmacotherapy.

(SYRAFA 2024 project in Slovakia)

Does it change the BP control ?

- Hypertension is rarely the reason for hospitalization (1-3%)
- 50% - 70% of hospitalized patients have hypertension
- Hospitalization – right time and place to revise therapy

469 patients screened

- Therapy: **34%** with SPC / polypill
- BP control: BP<140/90 mm Hg **25%**, Target BP **13%**

Admission

SYRAFA

- Therapy: **76%** with SPC / polypill
- BP control: BP<140/90 mm Hg **73%**, Target BP **45%**

Discharge



From wish to action: Memorandum about cooperation in Management of Hypertension 08/2024



Objective:

- To improve management of hypertension in Slovakia

Responsibilities:

- Awareness of hypertension in line with Charter 70/2028
- Improvement of adherence to treatment of chronic diseases
- Creation of working group from MoH, HIC, Medical Societies & Society of Pharmacists, University.
 - Availability of local guidelines in line with ESC, ESH guidelines
 - Availability of data about management of patients in Slovakia (epidemiology, Nb. of CV events, treatment, use of SPCs)
 - Availability of medicines for all patients (prices, co-payments)



„FAST HEROES“ project - 5 challenges in prevention

Hypertension prevention, awareness & education among young people in primary and secondary schools in line with MoH strategy



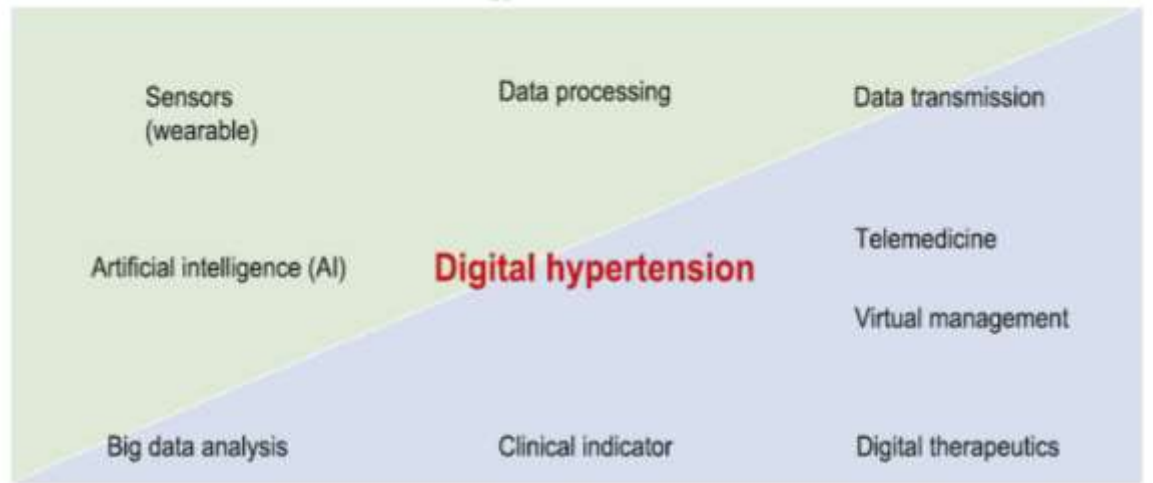
- ✓ *Hypertension workbook for primary schools*
- ✓ *3 educational videos for primary and secondary schools*
- ✓ *Exercises, quiz, etc.*
- ✓ *BP measurements will be carried out in selected schools across various regions of Slovakia in May 2026.*

Initiation of treatment by 2-SPC ACEi + CCB in optimized dose with Telemedicine support as Part of Healthcare for **Newly Diagnosed Hypertensive Patients** in line with guidelines.

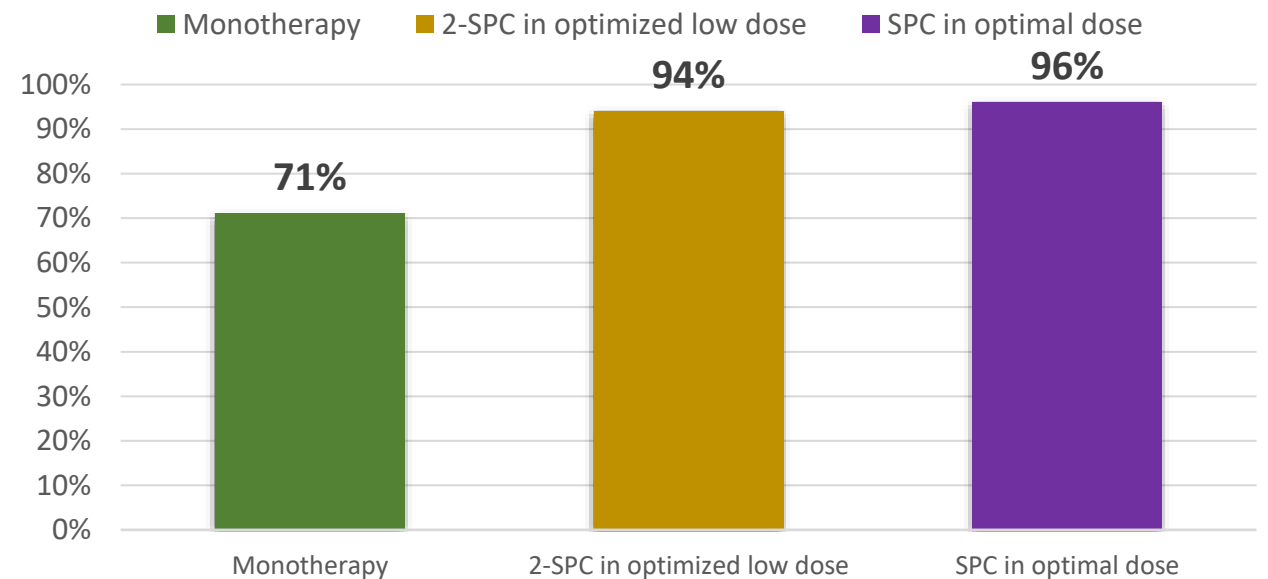


9/10 patients controlled in 3 Months

Information and communication technology



Treatment initiation of AH by SPC
in optimized low dose with support of telemonitoring
BP<140/90 mm Hg / 3 months



Ensuring
Consistency Across
All Levels of Patient
Management



Results: Ensuring consistency across all levels of patient management



Public

• **77%**

(MMM 2023, n=2499)

GPs

• **74%**

(HBPM 2023, n=3018)

SPECIALISTS

• **72%**

(HBPM – SPE 2023, n=514)

HOSPITALS

• **73%**

(SYRAFA 2024, n=469)

**AS ONE
we can achieve more!**

To decrease CV burden of the population / preventable deaths by **tight BP control** via commitment of all stakeholders and consistent, systematic implementation of GL to daily clinical practice.

Charta
70/2023

CONCLUSION

Charta
70/2028

"Charter 70" is not only a program, but a pledge,
a collective commitment to better cardiovascular health.

74%

A map of Europe is shown in light blue. Slovakia is highlighted in a darker red color. The text "74%" is overlaid in large blue font on the map, positioned over Slovakia. A large dark blue arrow points from the text box above towards the map.

Charta
70/2023

CONCLUSION

Charta
70/2028

"Charter 70" is not only a program, but a pledge,
a collective commitment to better cardiovascular health.

How can we overcome inertia
and engage all levels, patients,
healthcare professionals, and
systems in the fight against
hypertension?



Active participation from
patients in understanding
and managing their
condition



Empowered healthcare
providers with tools, time,
and support to deliver
personalized care



A responsive health system
that prioritizes prevention,
data-driven decisions, and
interdisciplinary
collaboration

