



●● Pressure Points: Addressing Hypertension at Work

Florida Alliance for Healthcare Value | May 23, 2024



Disclosure

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We **unleash the power of collaboration** between CDC and philanthropies, organizations, corporations, governments and individuals in order to protect the health, safety and security of America and the world.

We believe that by aligning diverse interests and leveraging all parties' unique strengths, these collaborations create **greater impact** than any one entity could alone.

Additional thanks to

- [National Forum for Heart Disease and Stroke Prevention](#)
- Employers who previewed, reviewed, and have tested the tools

Objective

To encourage employers to be proactive in identifying hypertension as a priority for improving health and wellbeing and reducing cost of care through sharing tools and strategies for success.



Hypertension, also called high blood pressure, is the **most common** health condition among US adults and affects more workers than either diabetes or depression.



**Hypertension:
3 in 10**



**Depression:
2 in 10**



**Diabetes:
1 in 10**

Employed adults are younger on average than the overall US adult population, yet 3 in 10 employees have hypertension.

1. FTI Consulting's Center for Healthcare Economics and Policy analyses of the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, BRFSS SMART City and County Prevalence & Trend Data for 2020 (https://www.cdc.gov/brfss/smart/Smart_data.htm). High blood pressure data from 2019. Prevalence rates vary across metro regions and states.

What is Hypertension (HTN)?

Hypertension **increases the risk for heart disease and stroke**, two leading causes of death in the United States.¹

Clinicians diagnose patients as having hypertension and make treatment decisions by comparing **patients' systolic and diastolic blood pressure readings** to certain thresholds.

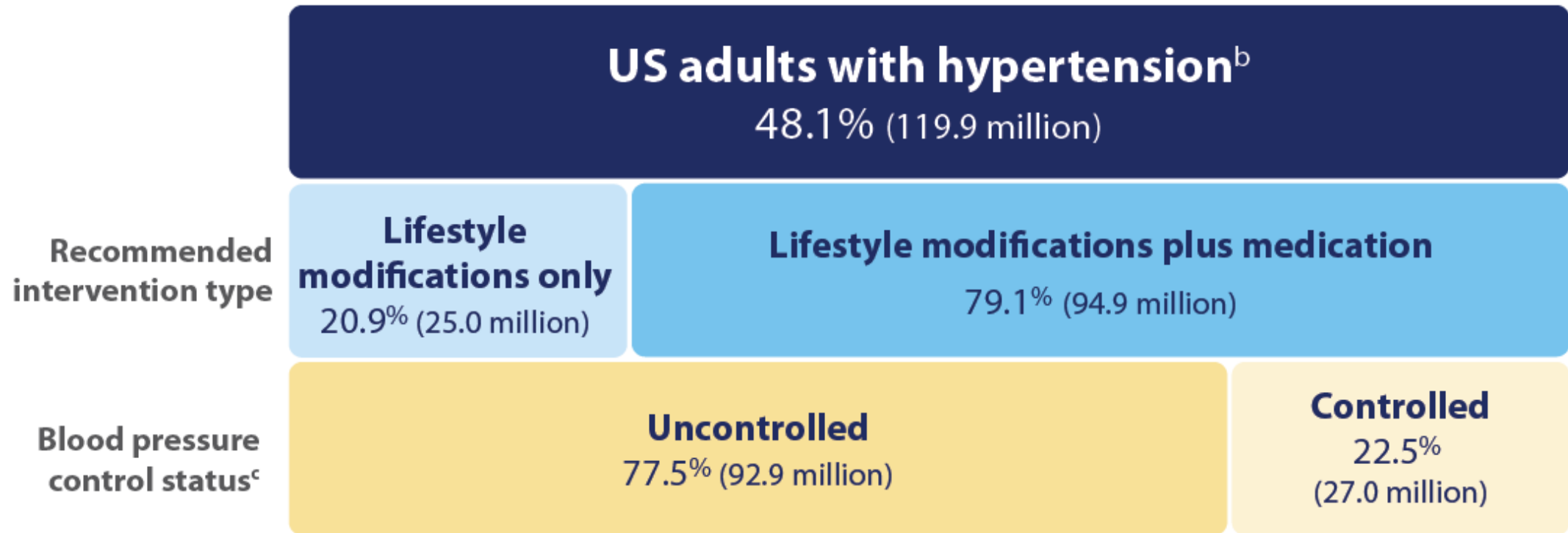
Current guidelines issued in 2017 by many organizations—including the American College of Cardiology (ACC) and American Heart Association (AHA)—define hypertension as **blood pressure consistently at or above 130/80 mm Hg**.²

1. Xu J, Murphy SL, Kockanek KD, Arias E. Mortality in the United States, 2021. NCHS Data Brief. 2022;456. Hyattsville, MD: National Center for Health Statistics.

2. Whelton PK, Carey RM, Aronow WS, Casey DE, Collins KJ, Dennison C, et al. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the prevention, detection, evaluation, and management of high blood pressure in adults. Hypertension. 2018;71(19):e13–115.

Estimated Hypertension Prevalence, Treatment, and Control (Blood Pressure <130/80 mm Hg) Among US Adults^a

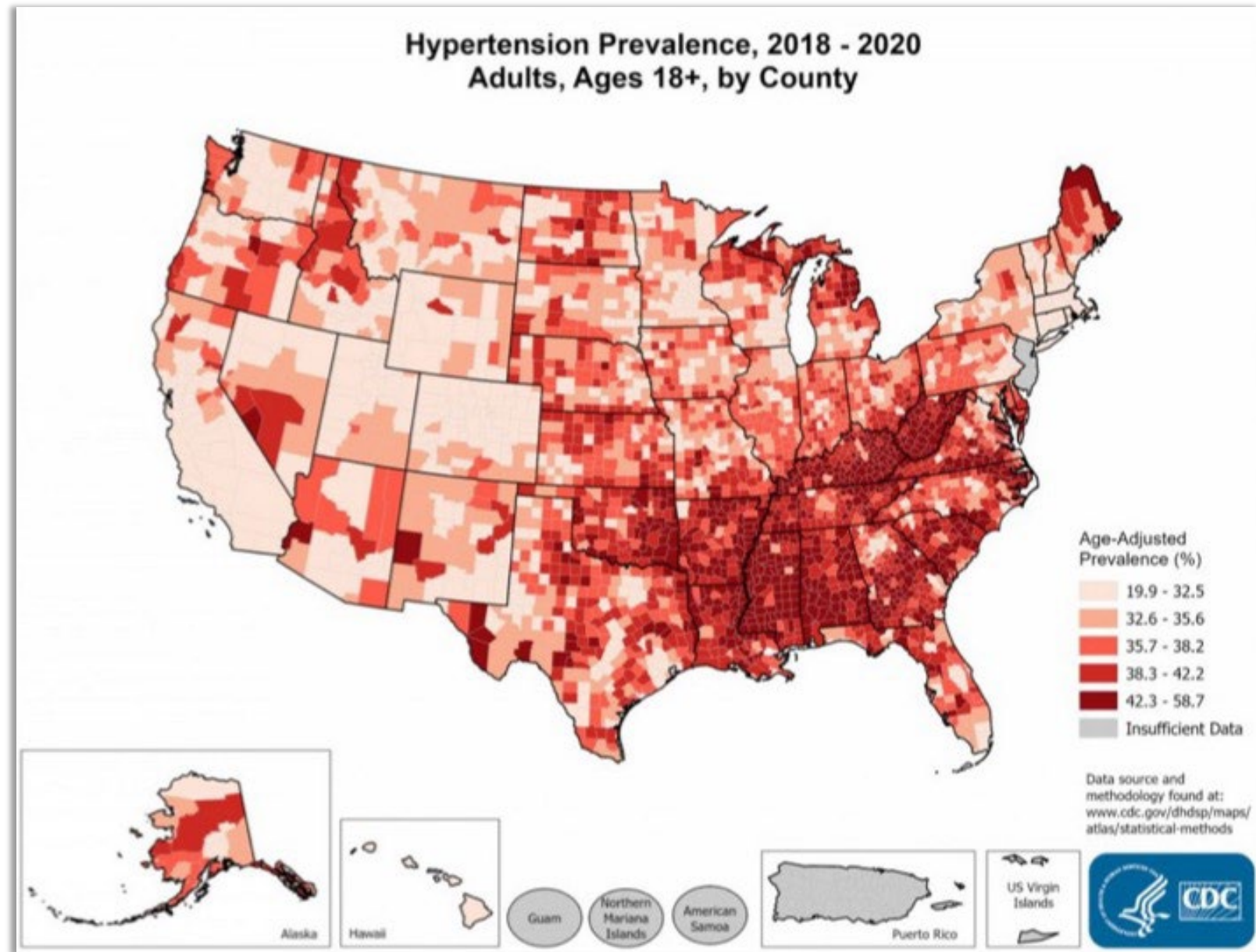
Applying the criteria from the American College of Cardiology and American Heart Association's (ACC/AHA) 2017 Hypertension Clinical Practice Guideline - NHANES 2017- March 2020



Hypertension Cascade: Hypertension Prevalence, Treatment and Control Estimates Among US Adults Aged 18 Years and Older Applying the Criteria From the American College of Cardiology and American Heart Association's 2017 Hypertension Guideline—NHANES 2017–2020. Centers for Disease Control and Prevention (CDC). May 12, 2023. Accessed (May 16, 2024). <https://millionhearts.hhs.gov/data-reports/hypertension-prevalence.html>.

Who is affected by hypertension?

Hypertension, also called high blood pressure, affects **almost half the U.S. adult population** and presents significant potential health risks.¹



1. Estimated Hypertension Prevalence, Treatment, and Control Among U.S. Adults. Million Hearts. Available at: [https://millionhearts.hhs.gov/data-reports/hypertension-prevalence.html#:~:text=Nearly%20half%20of%20adults%20have,5%20adults%20\(25.0%20million\).](https://millionhearts.hhs.gov/data-reports/hypertension-prevalence.html#:~:text=Nearly%20half%20of%20adults%20have,5%20adults%20(25.0%20million).)

Racial Disparities in Hypertension Diagnosis

Earlier age at hypertension onset may mean greater cumulative exposure to high blood pressure over a lifetime. This is associated with an increased risk of heart disease and may contribute to racial disparities in hypertension-related outcomes.



African American adults are more likely than white adults to **develop high blood pressure earlier** in life.


Find tips for control at cdc.gov/bloodpressure.



Hypertension Awareness and Control, Rate Per 100,000 Population by Age Group, 2022, Florida

Behavioral Risk Factor Surveillance System (BRFSS)

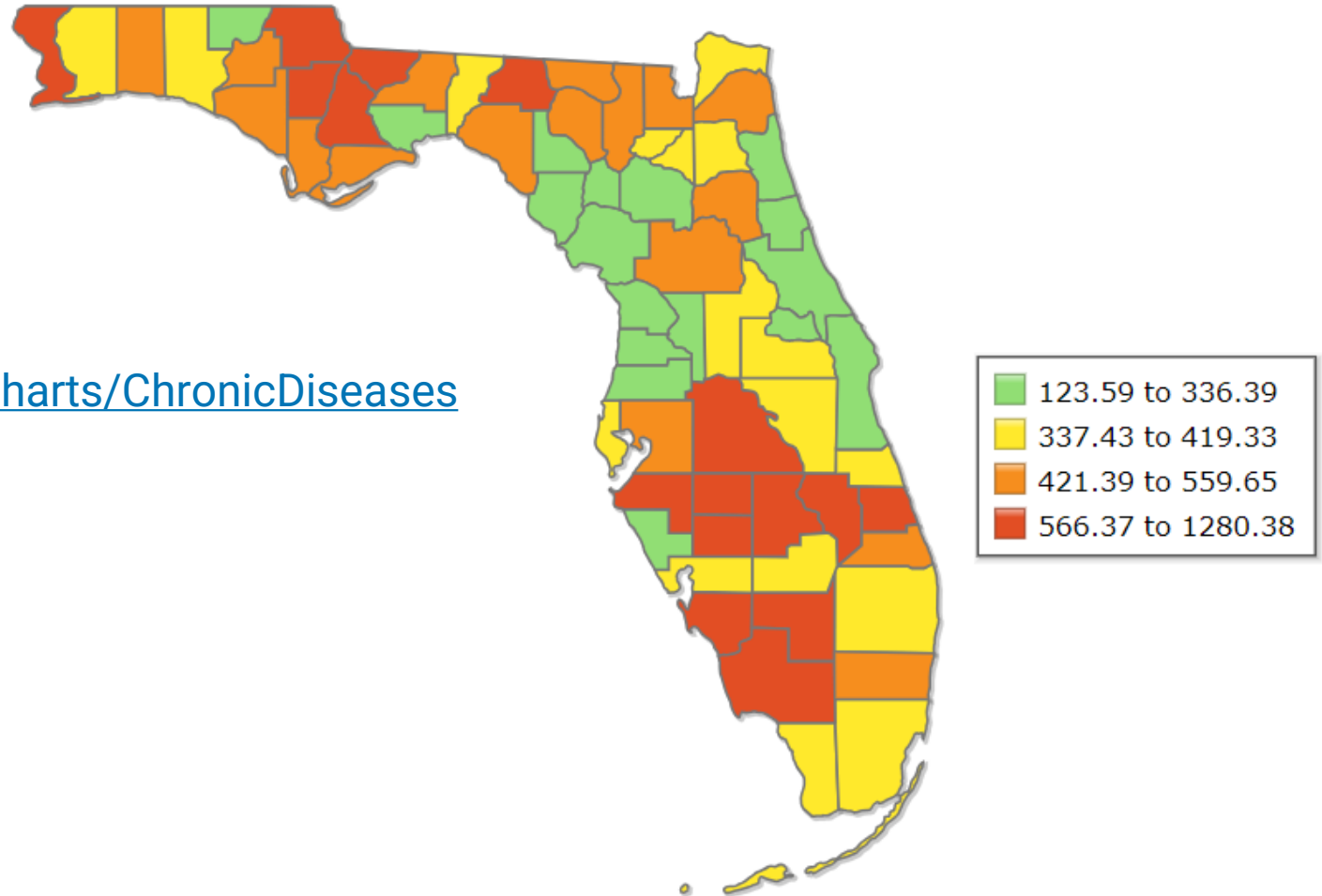
Select Dimension: Age Group Select County: Florida Select Year: 2022 State-Level Only



Listing of Indicators for the Selected Year	All	Ages 18-44*	Ages 45-64*	Ages 65 and Older*
Hypertension Awareness and Control				
Adults Who Have Ever Been Told They Had Hypertension (BRFSS)	38.5 (36.6 - 40.3)	15.1 (12.7 - 17.6)	42.3 (38.8 - 45.9)	61.8 (59 - 64.6)
Adults With Hypertension Who Engage in Blood Pressure Control Measures (BRFSS)	81.7 (79.3 - 84.1)	39.1 (31.2 - 47)	83.3 (79.2 - 87.3)	92.2 (90 - 94.3)

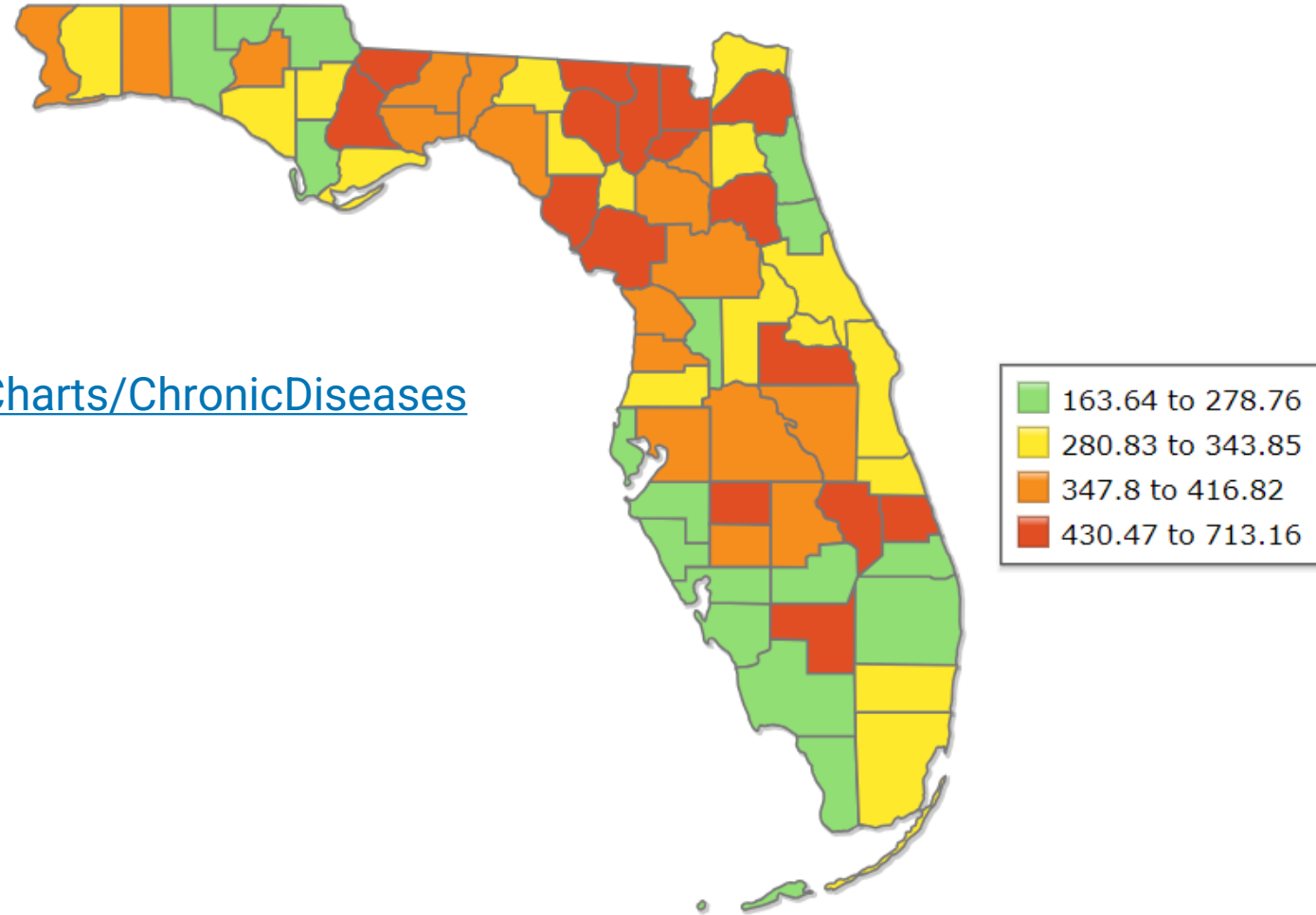
<https://www.flhealthcharts.gov/ChartsDashboards/rdPage.aspx?rdReport=BRFSS.Report>

Age-adjusted Emergency Department Visits From Hypertension, Rate Per 100,000 Population, 2022, by Florida counties



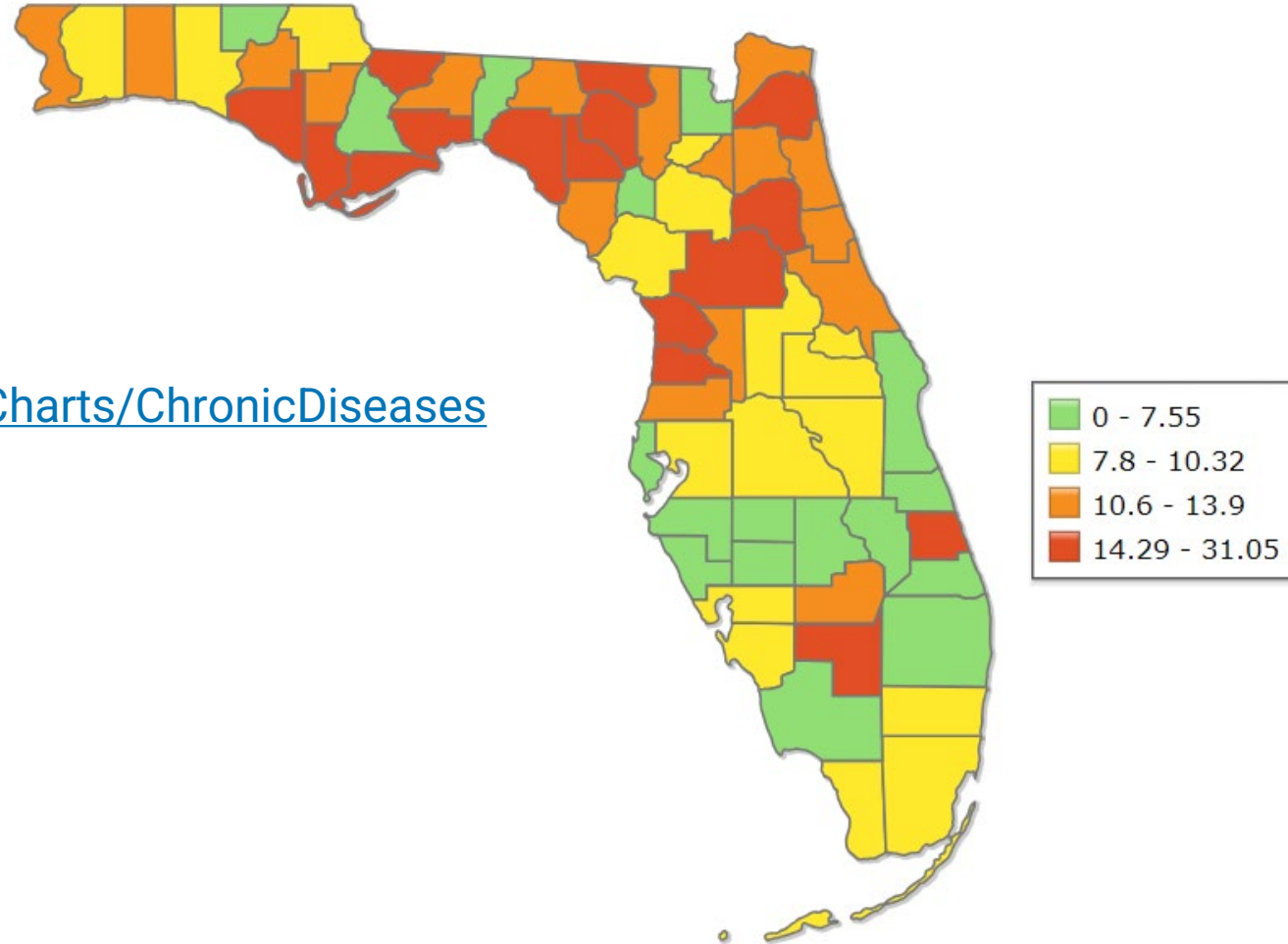
<https://www.flhealthcharts.gov/Charts/ChronicDiseases/default.aspx>

Age-adjusted Hospitalizations From Hypertension, Rate Per 100,000 Population, 2022, by Florida counties



<https://www.flhealthcharts.gov/Charts/ChronicDiseases/default.aspx>

Age-adjusted Deaths From Hypertension, Rate Per 100,000 Population, 2022, by Florida counties



<https://www.flhealthcharts.gov/Charts/ChronicDiseases/default.aspx>

Poll #1

What is the prevalence of hypertension in your population?

- 1) Less than 20%
- 2) 20%-39%
- 3) 40%-59%
- 4) 60% or greater
- 5) Unsure

Poll #2

How important is preventing and managing hypertension for your organization?

- 1) Low importance
- 2) Important
- 3) Unsure
- 4) Somewhat important
- 5) Very important

Hypertension is a workforce issue that affects individuals, their employers, and factors critical to a business' success.

#1 Priority for CEOs...

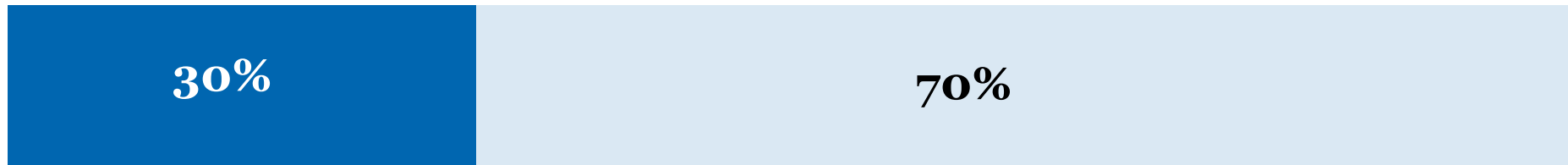
—
...should be the physical health and well-being of their employees, per an FTI Consulting survey of investors and professionals.

1. "CEO Leadership Redefined – 2023," FTI Consulting (2023), <https://fticommunications.com/ceo-leadership-redefined-2023/>.
2. "CEO Leadership Redefined: Part 1," FTI Consulting (2022), <https://www.fticonsulting.com/insights/articles/ceo-leadership-redefined-part-1>.

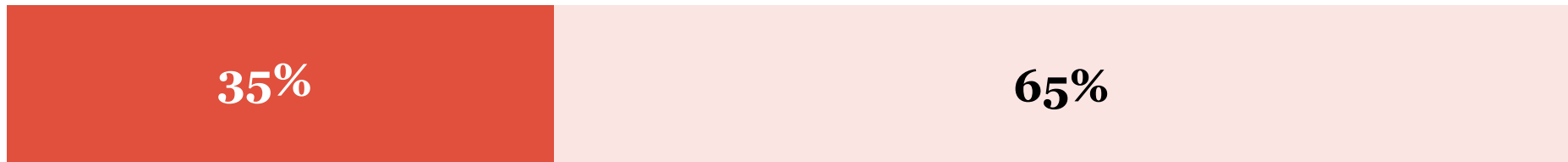
Many employees with hypertension are unaware of their condition or have uncontrolled hypertension.

Employee Hypertension Control and Awareness

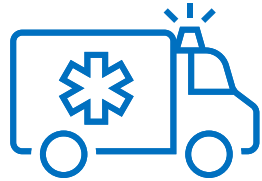
Are **not** aware of their hypertension diagnosis



Do **not** have hypertension under control



Employers face higher healthcare costs from employees with hypertension than those without hypertension.



Approximately **half** of US adults with hypertension have **at least one other health condition** such as high cholesterol, diabetes, or coronary heart disease.



44% higher

healthcare costs than individuals without hypertension in the employee population



2.3 times more

hours away from work among those with uncontrolled compared to controlled hypertension

Poll #3

Have you ever used a budget impact model before?

- 1) Yes
- 2) No
- 3) Unsure



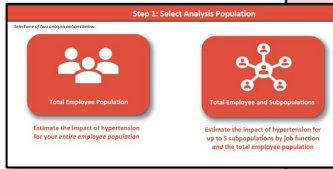
Budget Impact Model



Center for Healthcare Economics and Policy

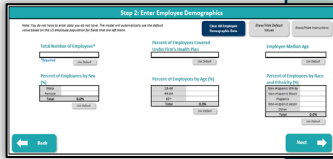
The Budget Impact Model (BIM) allows employers and communities to **easily estimate the impact** of hypertension on a specific employee population or a broader region.

Step 1. Decide Analysis Population to Estimate Impact of Hypertension



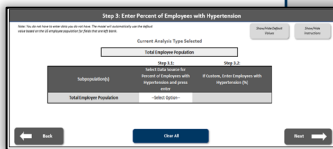
- An entire workforce or regional population
- Stratified groups in the workforce or job function
- **Key takeaway:** Analysis can account for up to 5 subgroups across industry sectors or job functions or demographics – critical for large employers or regions with various industry, which have different costs or prevalence

Step 2. Enter Demographic Characteristics



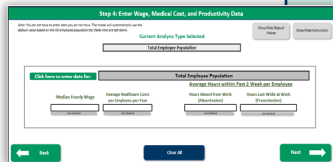
- Total target population; Proportion by age, sex, race covered under health plan
- **Key takeaway:** Customize the results by the demographic breakdown of a specific region or employer population

Step 3. Enter Hypertension Prevalence Data (if available)



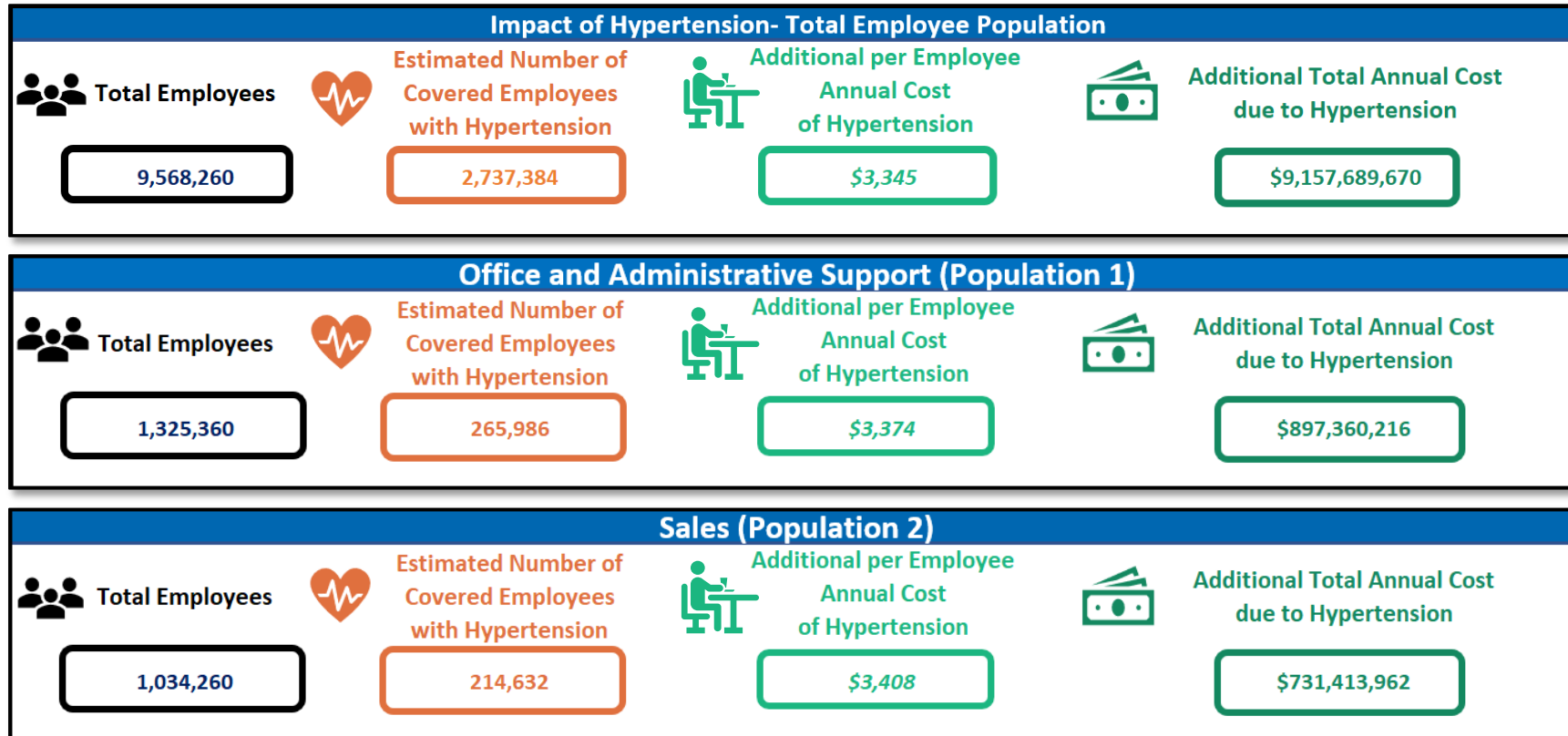
- If data are not available, use industry or job sector specific prevalence rates built into the model.
- **Key takeaway:** Prevalence rates vary by industry and job function and the analysis can take this into account

Step 4: Enter Average Wage and Hours Worked



- Use default values if data are not available
- **Key takeaway:** Customize the productivity loss cost estimates based on specific population or subgroups

The BIM estimates the incremental costs of hypertension for a specific employer or region overall and by sub-populations.



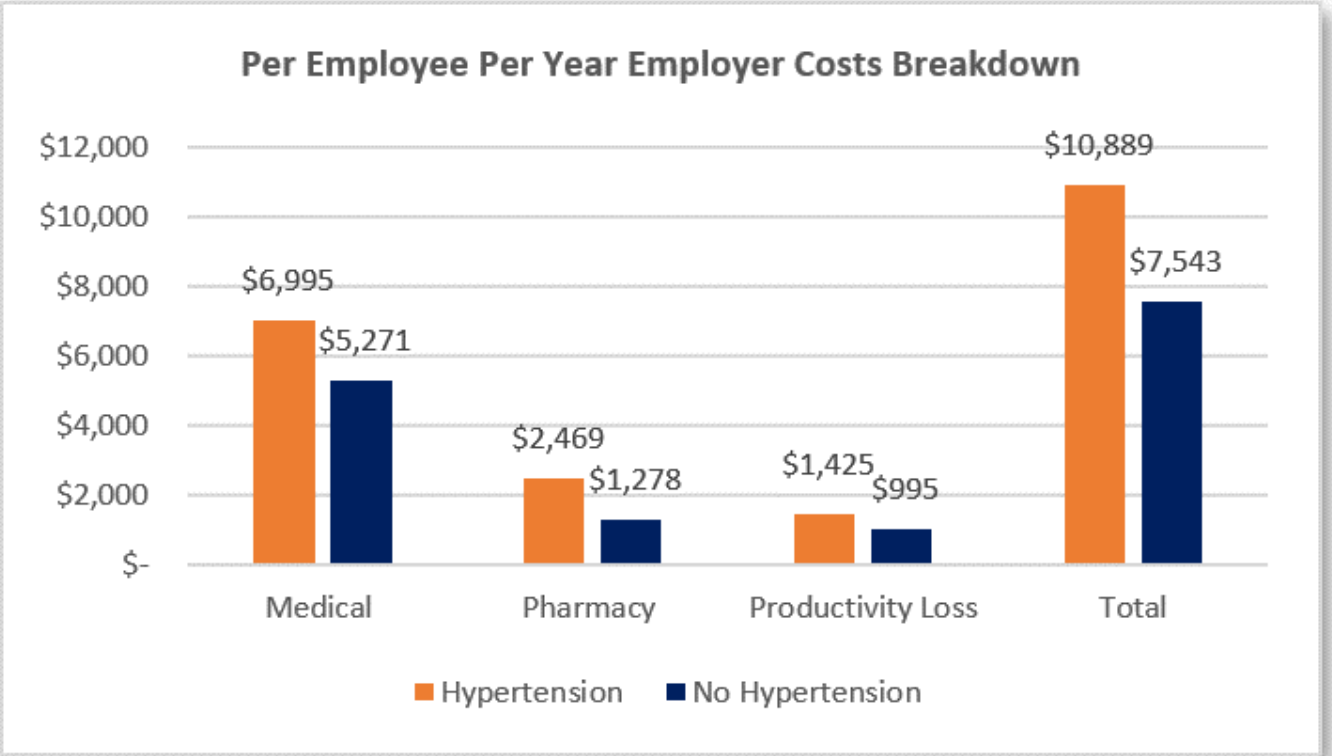
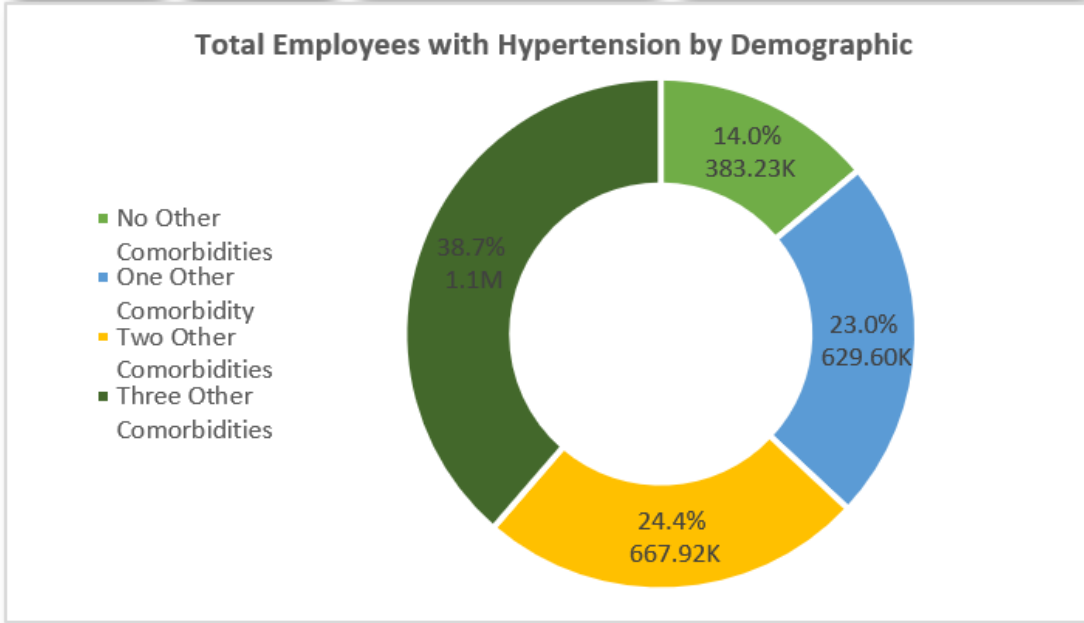
Example dashboard based on the state of Florida with a population of 9,568,260. Two subpopulations were analyzed separately.

Key takeaway: The dashboard shows, at a glance, the overall as well as the differential per person and total impact of hypertension for each sub-population.

The BIM generates **detailed health and cost impact results** for the total population and each sub-population.

Select options below to view hypertension by demographic characteristics

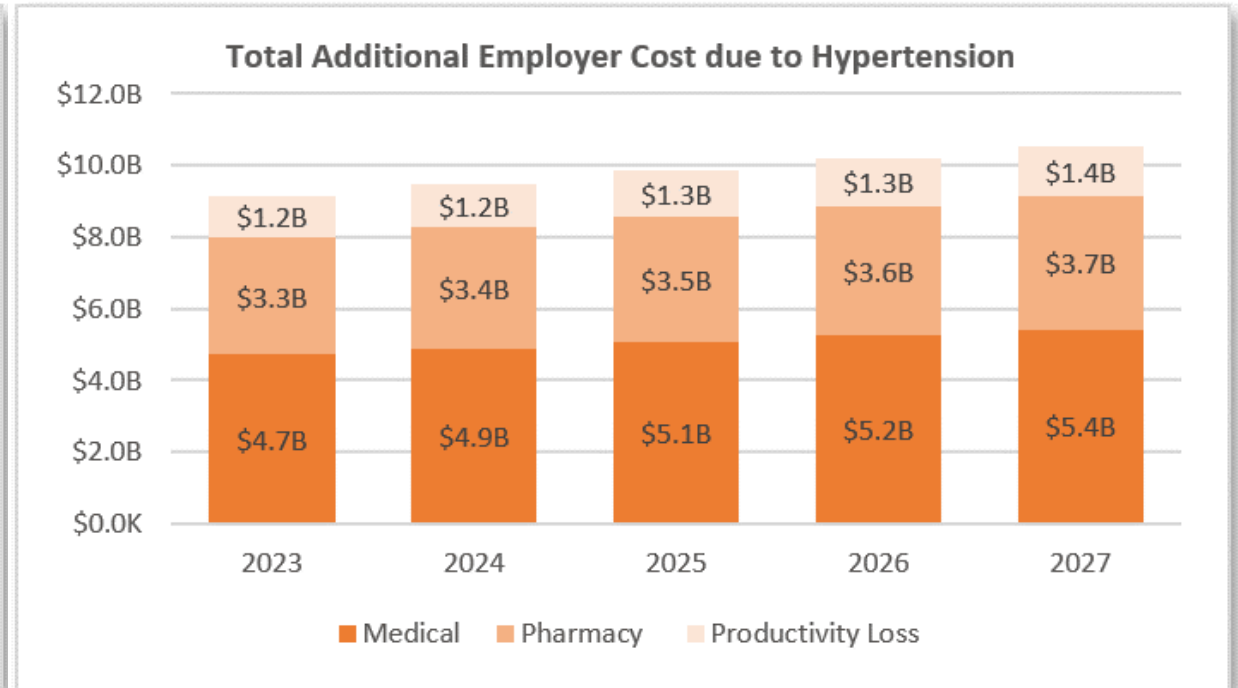
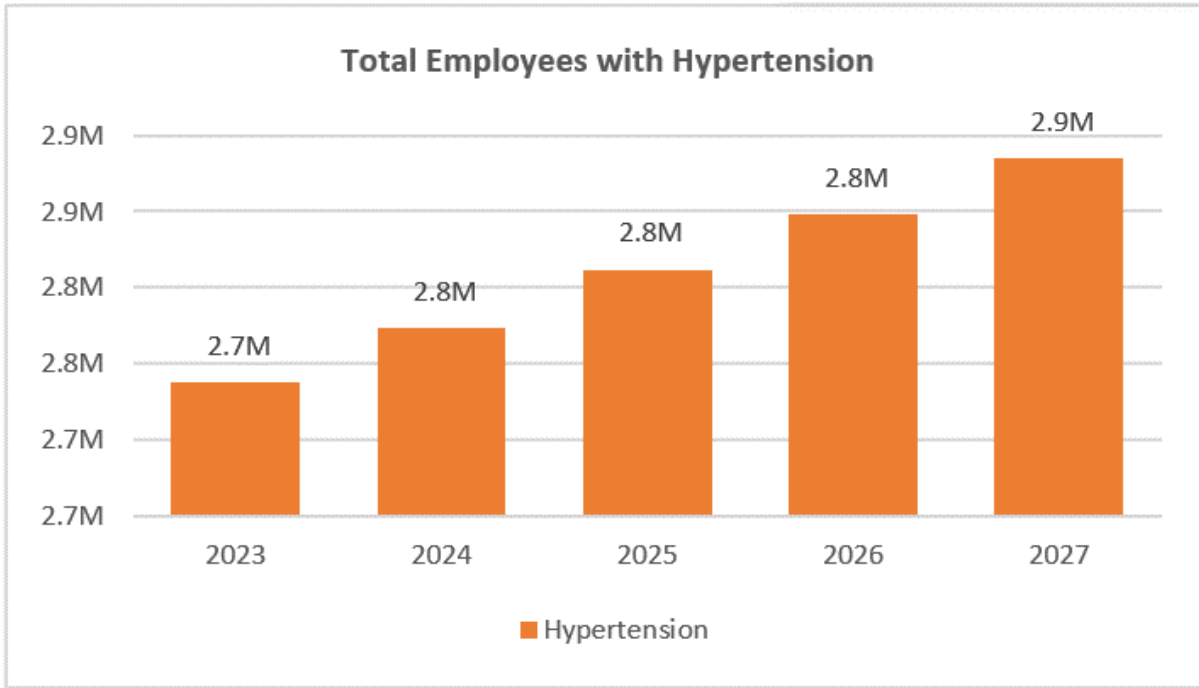
- Sex
- Age
- Race/Ethnicity
- No. of comorbidities



Example dashboard based on the state of Florida with a population of 9,568,260. Two subpopulations were analyzed separately.

Key takeaway: The BIM shows drivers of hypertension cost impacts (medical, pharmacy, and productivity loss) and the incremental costs.

The BIM generates **projected costs by cost type** and shows that without intervention, they will continue to increase.



Example dashboard based on the state of Florida with a population of 9,568,260. Two subpopulations were analyzed separately.

Key takeaway: The BIM provides data and transparency for your business in terms of opportunity costs and future costs with no additional intervention.



Claims Analysis Guide



Center for Healthcare Economics and Policy

The Claims Analysis Guide was developed to help **employers ask questions and obtain data to understand drivers and inform interventions** and insurance benefit decision-making.



Question 1: How many employees have hypertension?

- Provides data points for decision making including current number of employees with hypertension and number of employees newly diagnosed.



Question 2: What are the costs related to hypertension?

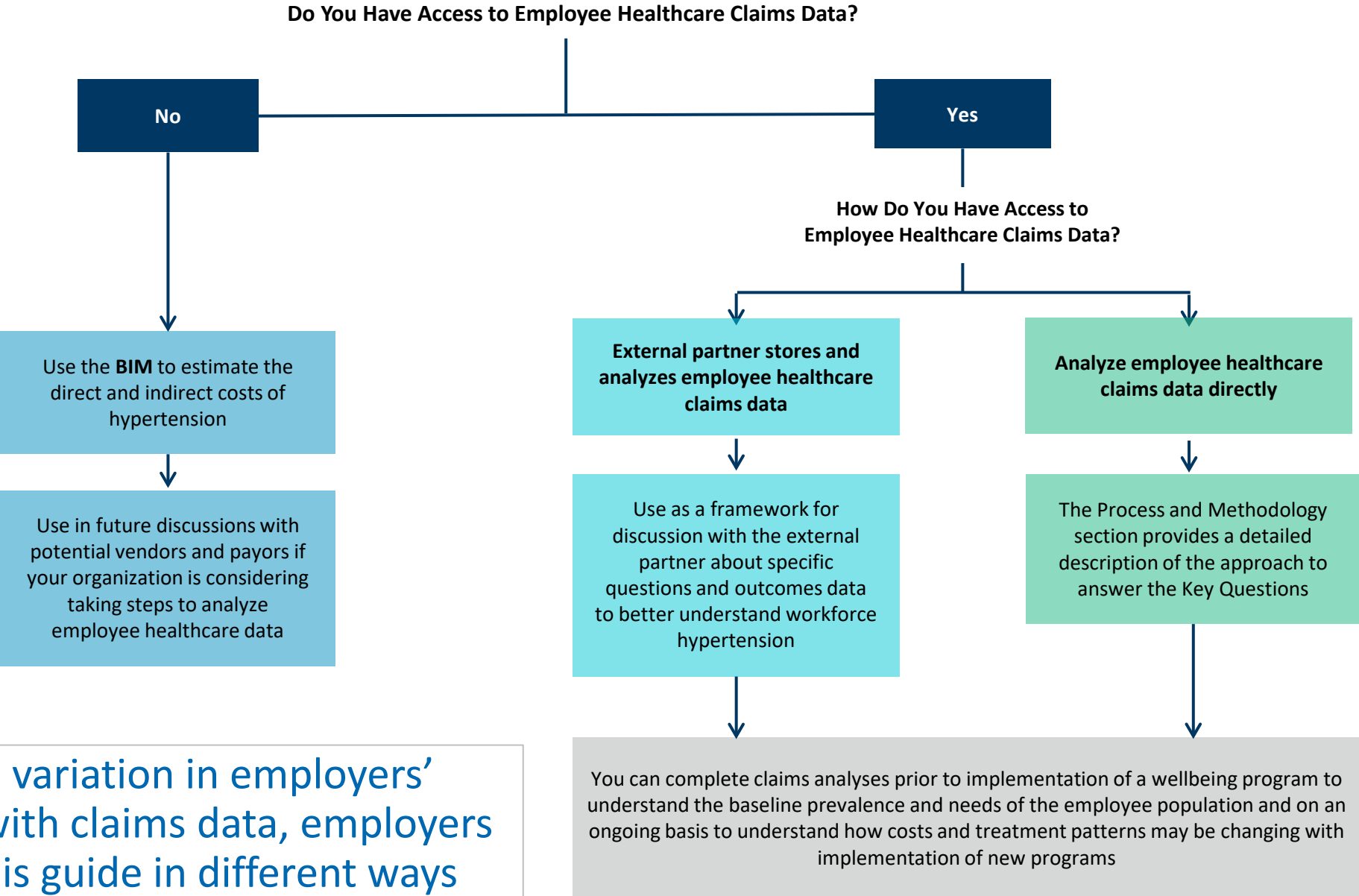
- Provides detailed insights on hypertension-related direct medical costs broken out by various categories such as age group, race/ethnicity, type of care (e.g., inpatient hospitalization, physician office visit), treatment category, and neighborhood characteristics as measured by the Social Deprivation Index (SDI).



Question 3: How many employees are treated with medication for hypertension?

- Provides data on hypertension treatment and adherence as measured by proportion days covered (PDC).

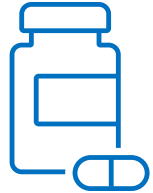
Using the Claims Analysis Guide



Given the variation in employers' experience with claims data, employers may use this guide in different ways

1. "Health Insurance Claims Analysis Guide for Employers," FTI Consulting (2023). Note: Developed for the CDC Foundation by FTI Consulting's Center for Healthcare Economics and Policy.

Employers have the power to help their employees get their hypertension under control and improve health and well-being outcomes - with a wide range of measurable benefits



Innovative Insurance Design

...such as *value-based insurance design* that reduces cost-sharing to encourage greater **adherence to high-value services and providers** (e.g., reducing cost-sharing of antihypertensive medications, provide coverage for home blood pressure monitors)



Specialized Benefit Programs

...such as free on-site blood pressure assessments and meetings with pharmacists, and incentives to encourage healthy lifestyles among employees (e.g., organized activity programs and healthy food and drink options at work)

1. Musich, S., Wang, S., & Hawkins, K, „The impact of a value-based insurance design plus health coaching on medication adherence and medical spending,” Population Health Management (2015). <https://www.liebertpub.com/doi/abs/10.1089/pop.2014.0081>.
2. Gibson, T., Sara W., Emily K., Candace B., Christine T., Feride F., Joseph D., & Edward Mauceri, "A value-based insurance design program at a large company boosted medication adherence for employees with chronic illnesses," (2011). <https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2010.0510>.
3. “Pharmacy coaching program improves Ohio health scores,” Drug Topics (8/29/2011), <https://www.drugtopics.com/view/pharmacy-coaching-program-improves-ohio-health-scores>.

Comprehensive Benefits Design Guide for Hypertension

Greater Philadelphia Business Coalition on Health

Comprehensive Benefit Design for Hypertension

7 Strategies for prevention, screening, and management

Employers are encouraged to view the strategies as a **checklist of key interventions** to implement for reducing the impact of hypertension: both by **reducing the number of individuals with hypertension** and **helping to control blood pressure for those diagnosed** with this chronic condition.

View the guide here: <https://hypertensioncontrol.org/wp-content/uploads/2023/11/Comprehensive-Benefit-Design-for-Hypertension.pdf>

September 2023



Comprehensive Benefit Design for Hypertension *Employer Recommendations for Action*

Hypertension (high blood pressure) affects nearly 50% of working-age adults in the U.S., resulting in significant impacts on health and well-being (e.g., cognitive decline, kidney disease), direct costs of care (e.g., hospitalization, physician visits), and indirect costs (absenteeism and presenteeism). This Comprehensive Benefit Design for Hypertension is intended to help employers, as purchasers of health benefits, and stewards of population health, develop and implement well-being and benefit design strategies to prevent, control, and manage the impact of hypertension.

The Comprehensive Benefit Design for Hypertension draws on a wide variety of resources from the U.S. Centers for Disease Control and Prevention, the American Heart Association, and similar organizations that are committed to improving population health and blood pressure control. These, and other resources are listed toward the end of this guide.

How Employers Can Use this Comprehensive Benefit Design for Hypertension

Employers are encouraged to view the following strategies as a checklist of key interventions to implement for reducing the impact of hypertension: both by reducing the number of individuals with hypertension, and helping to control blood pressure for those diagnosed with this chronic condition. These strategies are intended to improve the health of the workforce and the community, and lower healthcare costs. The Resource List provides additional information and tools to assist employers in implementing these seven strategies.

















Poll #4

What strategies have you considered for preventing and managing hypertension in your organization?



- 1) Lifestyle education (primary prevention)
- 2) Screening & detection (secondary prevention)
- 3) Care management and control (tertiary prevention)
- 4) All of the above
- 5) Other: *please share!*

Strategy 1: Primary Prevention/Lifestyle Support

- ❑ Healthy eating and physical activity programs
- ❑ Availability of healthy foods, including low-sodium options
- ❑ Promote smoke-free campus and smoking cessation
- ❑ Education and resources to limit alcohol intake
- ❑ Education and resources to promote healthy sleep
- ❑ Promote healthy weight: lifestyle, Rx benefit, surgical benefit
- ❑ Promote access to mental health resources, including EAP

DASH Eating Plan	
The Benefits: Lowers blood pressure & LDL "bad" cholesterol.	
 Eat This	 Limit This
 Vegetables	 Fatty meats
 Fruits	 Full-fat dairy
 Whole grains	 Sugar sweetened beverages
 Fat-free or low-fat dairy	 Sweets
 Fish	 Sodium intake
 Poultry	
 Beans	
 Nuts & seeds	
 Vegetable oils	

www.nhlbi.nih.gov/DASH

American Heart Association
Healthy for Good

FIGHT STRESS WITH HEALTHY HABITS



- 1. Slow down.**
Plan ahead and allow enough time to get the most important things done without having to rush.
- 2. Snooze more.**
Try to get seven to nine hours of sleep each night. To fight insomnia, add mindfulness and activity.
- 3. Let worry go.**
The world won't end if a few things fall off your plate. Give yourself a break and just breathe.
- 4. Laugh it up.**
Laughter makes us feel good. Don't be afraid to laugh out loud, even when you're alone.
- 5. Get connected.**
A daily dose of friendship is great medicine. Make time to call friends or family so you can catch up.
- 6. Get organized.**
Use "to-do" lists to help you focus on your most important tasks and take big projects one step at a time.
- 7. Practice giving back.**
Volunteer your time or spend time helping out a friend. Helping others helps you.
- 8. Be active every day.**
Exercise can relieve mental and physical tension. Find something you think is fun and stick with it.
- 9. Give up the bad habits.**
Too much alcohol, tobacco or caffeine can increase blood pressure. Cut back or quit to decrease anxiety.
- 10. Lean into things you can change.**
Make time to learn a new skill, work toward a goal, or to love and help others.

Learn more at heart.org/HealthyForGood

EAT SMART MOVE MORE BE WELL

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Strategy 2: Screening & Detection

- Promote primary care relationships
- Incorporate blood pressure (BP) measurement into health fairs and other events
- HRA's should include family history, and self-reported BP, or biometric measurement
- Determine how high BP findings will be referred/followed-up

Blood Pressure Categories



BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120-129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130-139	or	80-89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

American Heart Association. SS-10560 A/20

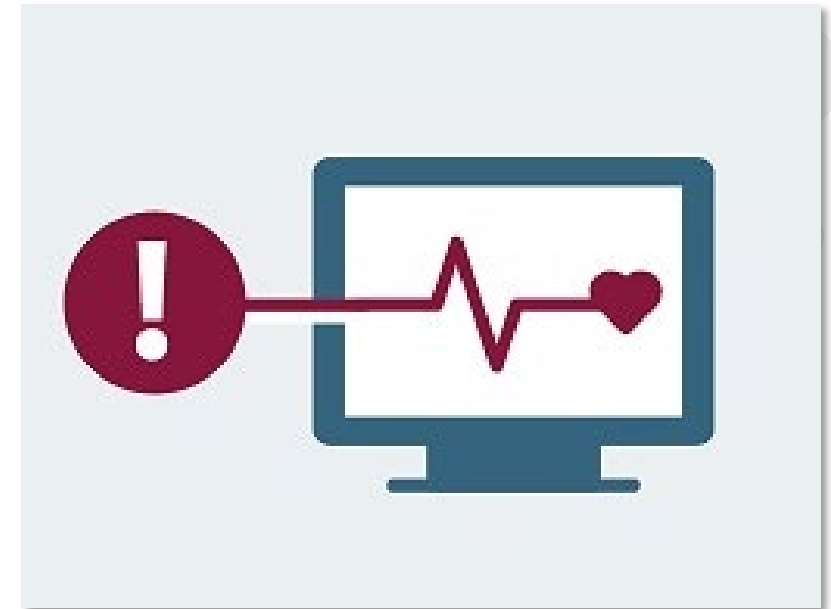
heart.org/bplevels

Strategy 3: Know YOUR Data

- Ask health plans and vendors to provide information on:
 - **Population prevalence of hypertension**
 - **Subgroup differences: age, gender, race/ethnicity, co-morbidities...**
 - **Percent (%) of population with HTN has a primary care relationship**
 - **Percent (%) of population with HTN on pharmacotherapy**
 - For those on pharmacotherapy, what is the adherence rate

- Ask and learn how each of these indicators are measured

- Track progress over time, looking at both prevalence and cost



https://www.cdc.gov/dhdsp/materials_for_professionals.htm

3b: Additional Questions for Health Plans

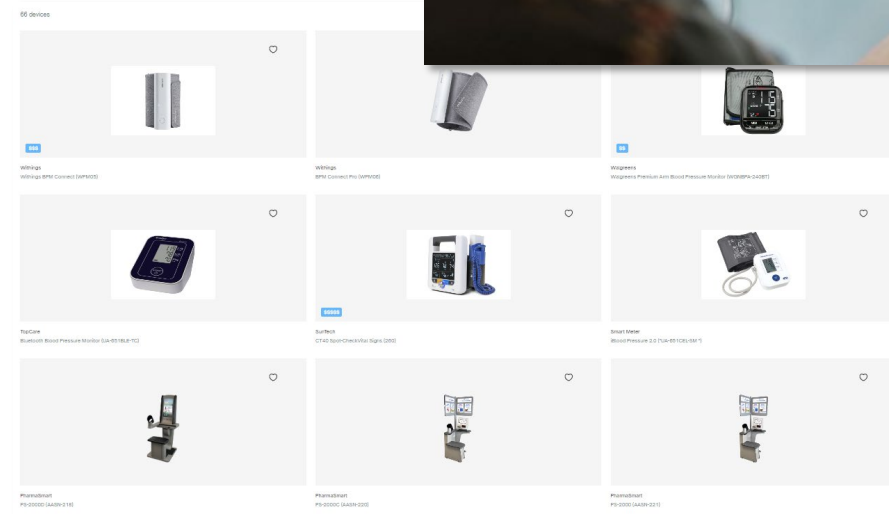
- What are your commercial HEDIS rates for the hypertension measures?
- What programs are you offering to manage hypertension?
- Is it possible to capture blood pressure in claims data?
- How are you trying to foster primary care relationships, especially for people with hypertension?

Controlling High Blood Pressure

Measure Year	Commerical HMO	Commercial PPO	Medicaid HMO	Medicare HMO	Medicare PPO
2021	60.3	50.8	58.6	70.4	70.1

Strategy 4: Benefit Design Considerations

- ❑ Value-based insurance design (V-BID) for HTN medications
- ❑ Coverage of self-monitoring BP cuffs (validated)
 - ❑ **Check out ValidateBP.org** (American Medical Association)
- ❑ Pharmacist review of formulary



<https://www.validatebp.org/>

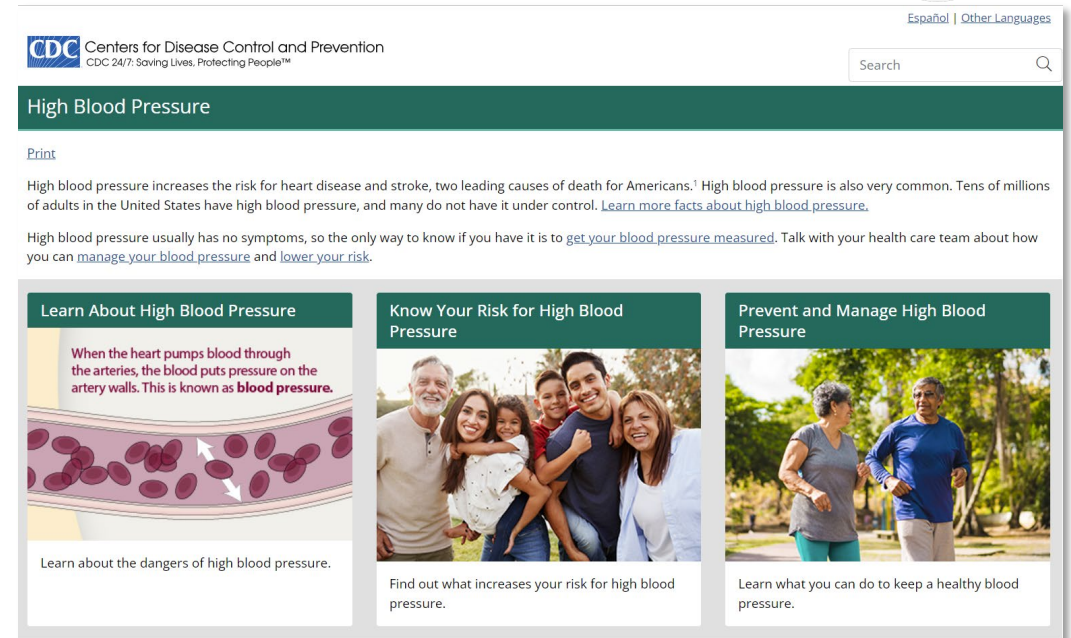
Strategy 5: Promoting Appropriate Care Management

- Ensure that all people with diagnosed HTN have a PCP
- Assess health plan programs and resources to support patient education and high-quality care
- Implement MTM or CMM (pharmacist review) for those with co-morbidities
- Consider outsourcing to a HTN management vendor, or providing access to self-management apps
- Ensure appropriate follow-up for hospitalizations related to HTN



Strategy 6: Promote a Supported Workforce with Resources

- ❑ Link to resources from AHA, CDC, and other organizations
- ❑ Easy access (including \$) to educational tools and programs
- ❑ Identify existing resources for individual counseling (e.g., registered dietitian), and consider adding services
- ❑ Recognize impact of Social Determinants of Health; identify and address inequities
- ❑ Consider fostering patient resource groups



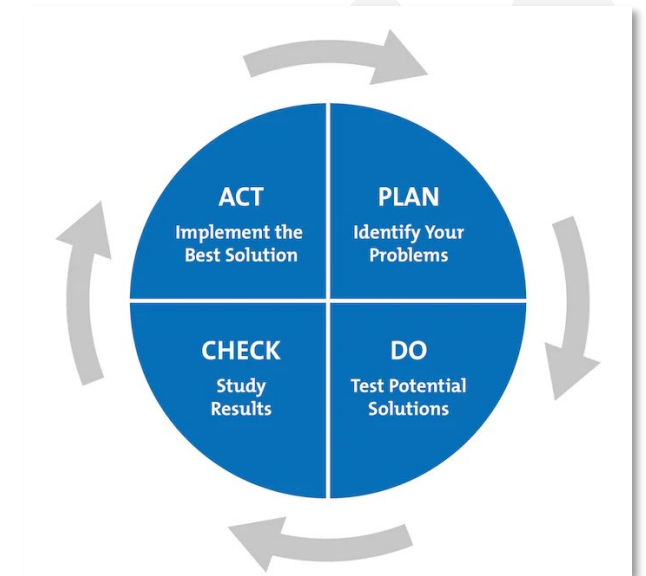
The screenshot shows the CDC website page for High Blood Pressure. The page features the CDC logo and tagline "Centers for Disease Control and Prevention CDC 24/7: Saving Lives, Protecting People™" at the top. A search bar is visible in the top right corner. The main heading is "High Blood Pressure". Below the heading, there is a "Print" link and a paragraph of text explaining that high blood pressure increases the risk for heart disease and stroke, and that many people do not have it under control. A second paragraph states that high blood pressure usually has no symptoms and that the only way to know if you have it is to get your blood pressure measured. Below the text, there are three columns of content:

- Learn About High Blood Pressure:** Includes a diagram of an artery with red blood cells and the text: "When the heart pumps blood through the arteries, the blood puts pressure on the artery walls. This is known as **blood pressure**." Below the diagram is the text: "Learn about the dangers of high blood pressure."
- Know Your Risk for High Blood Pressure:** Includes a photo of a diverse family and the text: "Find out what increases your risk for high blood pressure."
- Prevent and Manage High Blood Pressure:** Includes a photo of a man and a woman walking and the text: "Learn what you can do to keep a healthy blood pressure."

<https://www.cdc.gov/bloodpressure/index.htm#print>

Strategy 7: Evaluate and Continuously Improve Your Efforts

- ❑ Refer back to strategy 3: Know your data
- ❑ At least annually, track these key metrics:
 - **Hypertension prevalence**
 - **Hypertension control**
 - **Obesity prevalence**
 - **Incidence rates and costs for HTN-related events (cardiac and cerebrovascular)**
 - **Overall trends in direct cost for total population, and HTN subgroup**



<https://www.mindtools.com/as215i1/pdca-plan-do-check-act>

Key Takeaways

An investment in hypertension prevention and management is an investment in your business.

Hypertension is a **treatable** yet chronic health condition and a **hidden business risk** to employers.

With appropriate forecasting tools and actionable data, **employers have the power to manage this risk and improve health and wellbeing outcomes** for their employees.

New tools, such as the **budget impact model** and the **claims analysis guide**, **comprehensive benefits design guide**, and **choosing the right technology** can make it easy to reduce risk.

Poll #5

How likely are you to take action to address hypertension within your organization?

- 1) Very unlikely
- 2) Unlikely
- 3) Unsure
- 4) Likely
- 5) Very Likely

To learn more about these tools and use them, visit
<https://hypertensioncontrol.org/businesscase/>

Help us make hypertension control
a national priority.



Contact Us

Budget Impact Model + Claims Analysis Guide

Kyi-Sin Than – Kyi-Sin.Than@fticonsulting.com

Comprehensive Benefits Design Guide

Neil Goldfarb – NGoldfarb@GPBCH.org

Additional Information

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