Summary

Dr. Paul Whelton, a leading global expert on hypertension, delivered the opening keynote at the National Forum's 2025 Mid-year Convening. He underscored the urgent need to prioritize blood pressure control, presenting a clear overview of hypertension's causes, consequences, and evidence-based management strategies. Despite extensive knowledge and available interventions, he emphasized that hypertension control rates remain unacceptably low—especially in low- and middle-income countries—highlighting a pressing call to action.

Key Points & Takeaways

What is Hypertension?

- Defined as **systolic BP ≥130** or **diastolic BP ≥80**, or use of medications (formerly 140/90).
- **Prevalent worldwide**, especially among older adults and **non-Hispanic Black populations**.
- Most common in **low- and middle-income countries**.

Causes & Risk Factors

- **80–90%** of hypertension is linked to modifiable behaviors:
    - Poor diet
    - Physical inactivity
    - Excessive alcohol use
- Additional risk factors:
    - Genetic predisposition
    - High-normal BP
    - Family history
    - Adverse social conditions

Health Consequences

- Major driver of:
    - **Stroke**
    - **Heart disease**

    - **Kidney failure**
    - **Dementia**
- **#1 cause of death and disability-adjusted life years (DALYs)**—more than smoking or obesity.

Treatment Strategies

- **Lifestyle first** at lower BP levels:
    - Weight loss
    - Healthy diet
    - Sodium reduction / Potassium increase
    - Physical activity
    - Alcohol moderation
- **Medications** for higher BP or higher cardiovascular risk:
    - Begin with one of four standard classes
    - Often start with **single-pill combinations**
    - Escalate to **triple therapy** or specialist referral if control is not achieved

The Challenge

- Despite knowing "what works," **control rates are declining**:
    - U.S. control at 140/90: **below 50%**
    - Global control: **under 10%**
- Average treated systolic BP in U.S. = **138 mmHg**
    - To reach 80% control at <140, target **125 mmHg average**
    - Requires 20–25 mmHg reduction—**ambitious but achievable**

Opportunities for Progress

- **Implementation science** to ensure consistent application of known strategies
- Wider use of:
    - **Single-pill combinations** and **triple therapy**

    - **New oral and injectable drugs**
    - **Device-based therapies**
    - **Technology and AI tools**
- Address **medication adherence** and **comorbidities** to improve outcomes