Hypertension Redefined

Implications for Brokers and Employers

Background: Clinical Factors

Prehypertension and Hypertension ("HTN") are important issues for health plans, providers, and individuals. Because of high prevalence, the potential for dangerous costly complications, and the availability of effective treatments, HTN has been an important "target" for guideline development.

Key facts illustrating the importance of HTN for costs and health status are:

1. HTN is common: In the U.S. 80% of men and 85% of women over 75 years of age have HTN. Nearly 1 billion individuals worldwide have Stage 2 hypertension (the most severe stage).
2. Because of the increasing prevalence of risk factors for HTN (such as inactivity and overweight/obesity), the prevalence and consequences of HTN are expected to increase.
3. HTN is the second (after smoking) most important condition driving preventable deaths in the U.S.
4. HTN is a leading risk factor for downstream conditions (coronary artery disease, heart failure, stroke and kidney failure) that result in significant costs, morbidity, mortality, and disability.
5. The probability of developing a dangerous downstream condition increases in direct relationship to increasing blood pressure.
6. Although direct diagnosis and treatment (drug) costs related to HTN itself are relatively low, costs for significant conditions caused by HTN (for example, renal failure and dialysis or rehab and nursing home care after a stroke) hypertension are high, and significant disability often results.
7. There is now convincing evidence that adequately controlling blood pressure in individuals with HTN results in decreases in the incidence of complications of the disorder.

Guideline Summary

A new national guideline for detection, evaluation, and treatment of high blood pressure[1] has just been published. As a new national evidence-based standard, the new guideline will have a major impact on the ways in which HTN is diagnosed and treated.

Because of the complexity of the (200 page) guideline, adoption will most likely be incremental, occurring over several years. We anticipate that health plans, providers, and disease management and biometric screening firms will "readjust" their HTN norms.

[1] High Blood Pressure: hypertension or "HTN".

In general, the guideline establishes new (lower) blood pressure targets for diagnosis and treatment of HTN and adds new treatment modalities, including lifestyle modification for individuals just above the BP threshold. Consistent with the new cholesterol treatment guidelines; the cardiac risk score is now a mandatory factor in deciding whether to institute drug treatment.

Another important change is the recommendation for ambulatory home continuous BP monitoring as a component of the diagnosis and monitoring of HTN.

These changes have important health management and financial implications for both brokers and employers.

What are the Specific Changes?

The most important changes in the new guideline are:

1. Lowering of the threshold for diagnosis of prehypertension (elevated BP) and HTN.
2. Elimination of a higher HTN threshold for older adults.
3. Lowering of the "treatment target" BP.
4. Addition of ambulatory (home) BP monitoring as recommended diagnostic and disease management service for the diagnosis and treatment of elevated BP and HTN.
5. Addition of lifestyle modification as a strongly recommended treatment modality.

Factor	Old	New
Definition of HTN	Prehypertension: >130/80 HTN: >140/90	Elevated BP: >120/80 Stage 1 HTN: >130/80 Stage 2 HTN: >140/90
Age Adjustment	Yes (higher threshold for diagnosis in older adults)	None
Ten Year Cardiac Risk Calculation	Not used	A major factor in determining whether to treat
Treatment Threshold	Adults <65: >140/90 Adults >65: >150/90	120/80 (lifestyle modification) 130/80 (drugs or lifestyle modification; depends on cardiac risk)
Treatment Target	< 140/90	< 130/80
Home BP Monitoring	No recommendation	Routine part of diagnosis and monitoring.
Telemedicine	No recommendation	Routine service for monitoring and treatment of individuals with established HTN.

What are the Implications for Brokers and Employers?

The guideline will result in major changes in the diagnosis and treatment of HTN. These changes have important implications for employer groups:

1. The "baseline" is being reset (to 120/80). Because of a lower threshold for diagnosis of elevated blood pressure, it is estimated that the new guideline will result in 46% of adults carrying a diagnosis of elevated BP or HTN. This will make comparison (to prior period values) of new biometric, utilization, drug use, and diagnosis-related cost data difficult.

2. Application of the new treatment guidelines will result in an additional 2% (or more) of all adults (4.2 million individuals in the U.S.) receiving drug treatment for elevated blood pressure. Plans with "maintenance drug" member cost share forgiveness will experience higher cost increases than plans with "standard" formulary designs.

3. Because of the complexity of the new guidelines and inclusion of factors that cannot be abstracted from claims data (for example, cardiac risk), some gaps in care metrics (for HTN) will become more difficult or impossible to quantify. Some gap scores will not be comparable to prior periods.

4. Ambulatory (home) blood pressure monitoring is now recommended as a routine important/essential procedure for treatment-monitoring for all patients with suspected or existing HTN. This will cause increases in professional and medical equipment costs for diagnosis and treatment of HTN in adults. Coverage and member cost share issues will need to be addressed.

5. Telemedicine is now recommended as an adjunct to home monitoring in adults with established HTN. Coverage and member cost share issues will need to be addressed. Plans not currently offering a telemedicine benefit may need to consider doing so.

6. Lifestyle risk factor modification is an intrinsic treatment component of the new guideline for all individuals with BP >120/80. This may result in increased costs due to increased demand for health plan or 3rd party vendor services.

7. If a 3rd party (lifestyle, risk, or disease management vendor contract is in place, contract terms may change. The likelihood of this occurring will depend on existing vendor contract terms.

8. Until health plans "catch up" with the new guidelines, members may receive denials for home monitoring and telemedicine costs. We would expect increases in member appeals and the communication "burden" on employers.

In summary, Employers and Brokers should expect that an increased percentage of members will be diagnosed with preHTN or HTN, that costs for diagnosis and treatment of members with these disorders will rise, and that additional diagnostic and treatment services will need to be covered by plans.

Background: Guideline Development

Since 1977, HTN diagnosis and treatment guidelines have been developed and published by the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure (the "JNC"). Members of this Committee have historically been appointed by the National Heart, Lung, and Blood Institute ("NHLBI"; part of the National Institutes of Health).

The most recent comprehensive Blood Pressure guideline (JNC7) was published in 2003. The JNC began work on modifications to this guideline ("JNC7") in 2008. In 2013, before the final updated guideline was published, NHBLI disbanded the JNC and transferred responsibility for development of CVD prevention guidelines to the American Heart Association and the American College of Cardiology.

In 2014, the AHA and ACC (in partnership with nine other professional societies) began work on a new national blood pressure guideline. The ACC/AHA 2017 guideline has now been published (November 2017), and is the most comprehensive BP guideline since JNC7 and modifications to it proposed (but never universally adopted) in the 2008 – 2013 time-frame.

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