# A Gap Analysis of Primary Care Providers' Management of Antihypertensive Medication Non-Adherence

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## Introduction

- Hypertension is:
  - the most common chronic disease in the United States (1/3 of adults)
  - the leading cause of stroke, cardiovascular disease, and chronic kidney disease
  - easily treated with medication yet control is still suboptimal

## Background & Significance

- Hypertension:
  - "silent killer"- asymptomatic
  - Most prevalent modifiable risk factor for premature cardiovascular disease
  - Primary or contributing cause of death for > 410,000 Americans
  - 2012-2013 cost for US = $51.2 billion

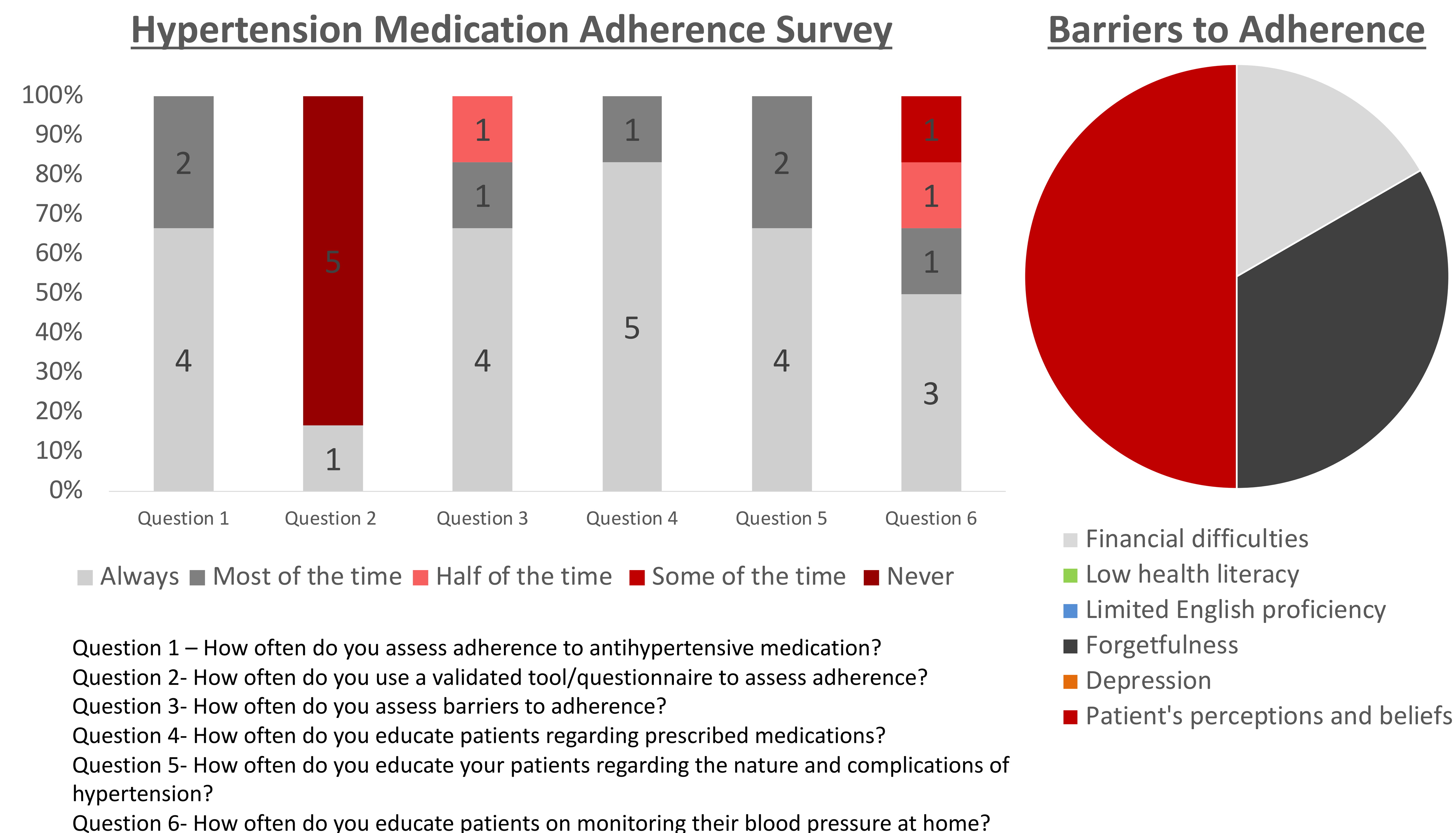
## Medication & Adherence

- Pharmacologic therapy produces a 50% risk reduction of heart failure, 30-40% risk reduction in stroke, and 20-25% reduction in myocardial infarction
- ¾ do not take their medication as directed
- Up to 25% do not fill their initial prescription for antihypertensive therapy
- Poor adherence is linked to increased medical interventions, increased morbidity and mortality, and $300 billion in additional doctor visits, ER visits, hospitalizations, and testing

## Methodology

- Setting- multi-specialty outpatient office with five family medicine physicians, 1 FNP, one cardiologist, one cardiology NP, and one gastroenterologist
- Twelve question five-point Likert style scale addressing evidence-based care for assessment and management of antihypertensive medication therapy seeking practice patterns
- Inclusion criteria – healthcare providers who provide care for adults diagnosed with hypertension
- 75% participation rate; 6 participants
- Results analyzed via statistical means
- Evidence-based toolkit created based off of results of survey consisting of:
  - Guidelines to address adherence including templates of MMAS-4, MMAS-8, HB-HBP
  - How and when to assess and manage barriers to adherence
  - How and when to educate patients including educational tools for patients about adverse effects of hypertension, asymptomatic nature of hypertension, side effects of medications, and importance of checking blood pressure at home
  - Tools to help providers set their patients up for success with proper medication adherence

## Results




## Discussion

- Providers are not always assessing adherence to antihypertensive medication and barriers to medication adherence
- Providers are not using a standardized tool
- Most common barriers – patient's perceptions and beliefs, forgetfulness, financial difficulties
- Education is almost always provided about medications but not about complications of uncontrolled hypertension and checking blood pressure at home
- Providers are not addressing identified barriers
- Findings consistent with literature review

## Implications

- Still many gaps present in the assessment and management of antihypertensive medication non-adherence
- "Drugs don't work in people who don't take them"
- Providers need to follow evidence-based guidelines and seek additional education
- National Hypertension Control Roundtable founded by AANP, AMA, AHA, CDC, etc.
  - Goal – improve hypertension control rates by at least 30% by 2025
- Million Hearts 2022 by CDC and CMS
  - Goal – prevent one million heart attacks and strokes in five years, partially by ensuring adequate control of hypertension
  - SIMPLE method – acronym for providers to assist patients to achieve proper adherence
    - Simplify the regimen
    - Impart Knowledge
    - Modify patient's beliefs and behaviors
    - Provide communication and trust
    - Leave the bias
    - Evaluate Adherence

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