



Together2Goal[®]

AMGA Foundation
National Diabetes Campaign



Monthly Campaign Webinar

February 21, 2019

Today's Webinar

- Together 2 Goal® Updates
 - Webinar Reminders
 - AMGA Annual Conference
 - New Campaign Partnership
 - 2019 Million Hearts® Hypertension Control Challenge
- Clinical Inertia and Diabetes Care
 - Daniel McCall, M.D., M.S.P.H. of Hattiesburg Clinic
- Q&A
 - Use Q&A or chat feature



Webinar Reminders



- Webinar will be recorded today and available the week of February 25th
 - www.Together2Goal.org
- Participants are encouraged to ask questions using the “Chat” and “Q&A” functions on the right side of your screen



2019 AMGA Annual Conference



March 27-30, 2019

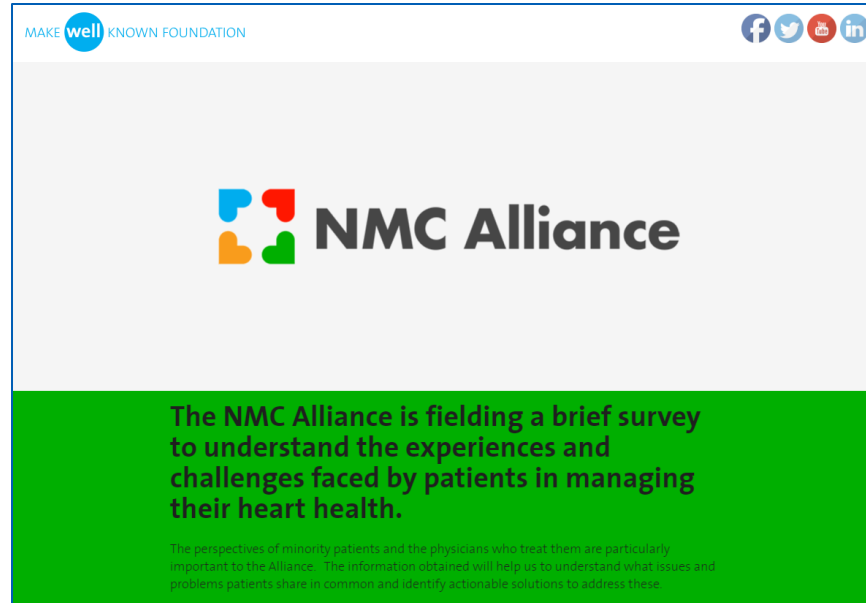
National Harbor, MD

- New this year: AMGA will offer networking discussion groups by hot topic and by organizational type.
- Registration now open at amga.org/ac2019
- AMGA Foundation Celebration
 - Friday, March 29, 2019
6:30 – 8:00 p.m. EST



Register by **Friday, March 8**
for the next lowest rate

New Partnership: National Minority Cardiovascular Alliance



Visit <https://www.surveymonkey.com/r/2TMHKTQ>
to view the survey.

2019 Million Hearts[®] Hypertension Control Challenge

- Health professionals, practices, and health systems that have achieved hypertension control rates of at least 80% are eligible to enter
- Submission deadline is April 1
- Visit <https://millionhearts.hhs.gov> for more information

The 2019 Million Hearts[®] Hypertension Control Challenge is now open!

Share your application by April 1.



Today's Featured Presenter

Daniel McCall, M.D., M.S.P.H.



Clinical Endocrinologist
 Associate Medical Director
 Medicare and Commercial ACO Programs
 Hattiesburg Clinic



Clinical Inertia and Diabetes

DAN MCCALL MD MSPH

Clinical Inertia and Diabetes

- Define clinical inertia
- Review the major causes of clinical inertia
- Review data detailing clinical inertia in diabetes care
- Case study in overcoming clinical inertia - hypertension control improvement at the Hattiesburg Clinic
- Lessons learned – how to avoid clinical inertia

Clinical Inertia – What is it?



Sir Isaac Newton's first two laws of physics:

A property of matter by which it continues in its' existing state of rest or uniform motion in a straight line, unless that state is changed by an external force.

Lawrence S. Phillips in 2001 defined **Clinical Inertia**:

- Failure of health care providers to initiate or intensify therapy
- Problem of the health care profession and the health care system
- Separate from patient related issues of adherence and access to care

Clinical Inertia Lawrence S. Phillips, MD; William T. Branch Jr., MD; Curtiss B. Cook, MD; Joyce P. Doyle, MD; Imad M. El-Kebbi, MD; Daniel L. Gallina, MD; Christopher D. Miller, MD; David C. Ziemer, MD; and Catherine S. Barnes, PhD Ann Intern Med. 2001;135:825-834

Clinical Inertia – What is it?

- Advances in clinical understanding take approximately 5-10 years to translate into clinical practice
- Strong evidence for effective treatment of diabetes, hypertension, and hyperlipidemia can prevent or delay microvascular and macrovascular disease complications
- Management goals and effective therapies are well defined and available
- **Healthcare providers often do not initiate or intensify therapy**

Three Major Causes of Clinical Inertia

- Overestimation of care provided and adherence to care guidelines
- Use of “soft” reasons to avoid intensification of therapy
 - Care “improving” despite time to achieve steady state
 - Delaying pharmacologic therapy due to “dietary nonadherence”
- Lack of education, training, and practice organization focused on achieving therapeutic goals
 - Prover lack of knowledge in need for dose escalation or need for multiple medications to achieve therapeutic goals

Clinical Inertia in Type 2 Diabetes: Impact of Diabetes

Prevalence

- 30.3 million (**9.4% population**) in the US with diabetes

Morbidity

- Leading cause of vision loss, kidney failure, limb amputation
- 2x Heart disease and stroke risk – events occur at earlier age

Mortality

- 7th Leading Cause of death although more recent data although more recent data suggest 3rd behind heart disease and malignancy

Cost

- \$327 billion total cost in US in 2017
- Over 1 in every 4 healthcare dollars spent in US caring for people with diabetes
- Average medical expenditures 2.3 times higher than those without diabetes

Clinical Inertia in Type 2 Diabetes: Evidence and Clinical Guidelines

Evidence for intensive glycemic control:

United Kingdom Prospective Diabetes Study (1998) ¹

A1c 7% intensive group vs 7.9% conventional therapy

25% reduction in microvascular complications

Clinical Guidelines:

American Diabetes Association – Standards of Medical Care in Diabetes – 2019 Care Recommendations:

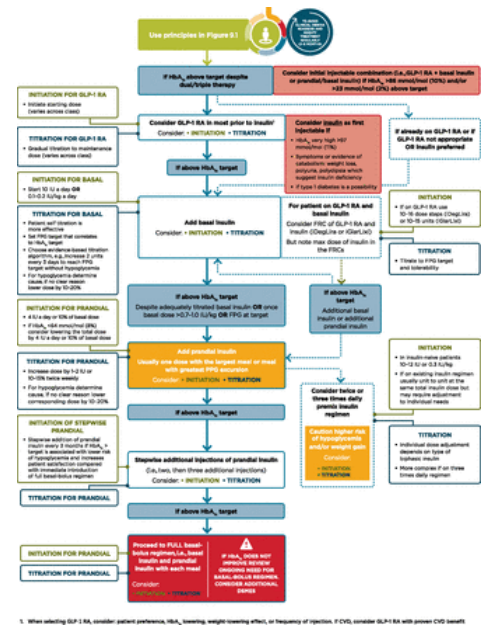
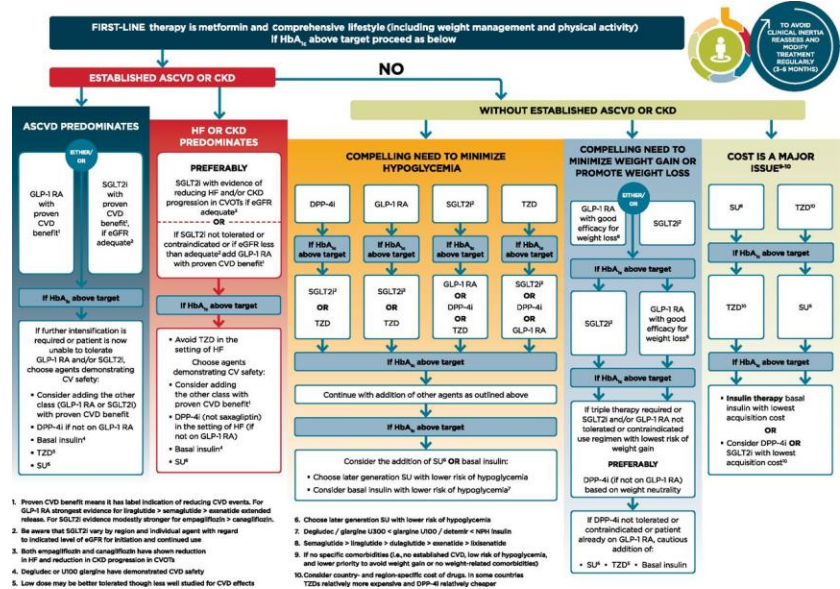
A reasonable A1C goal for many nonpregnant adults is <7%. Providers might reasonably suggest more stringent A1C goals (such as <6.5%) for selected individual patients if this can be achieved without significant hypoglycemia or other adverse effects of treatment (i.e., polypharmacy). Appropriate patients might include those with short duration of diabetes, type 2 diabetes treated with lifestyle or metformin only, long life expectancy, or no significant cardiovascular disease. ²

¹ Lancet 1998 Sep 12;352(9131):837-5

² Diabetes Care January 01 2019; volume 42 issue Supplement 1

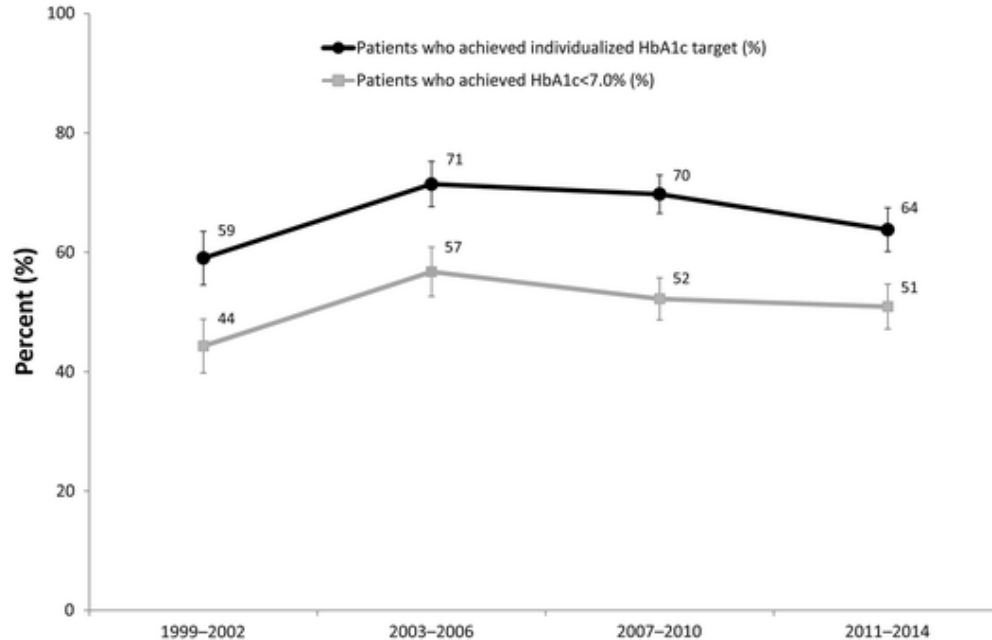
Clinical Inertia in Type 2 Diabetes: Clinical Guidelines

ADA – Standards of Medical Care in Diabetes - 2019:



1. When selecting GLP-1 RA, consider patient preference, HbA_{1c} lowering, weight lowering effect, or frequency of injection. 2. FICs consider GLP-1 RA with proven CVD benefit.

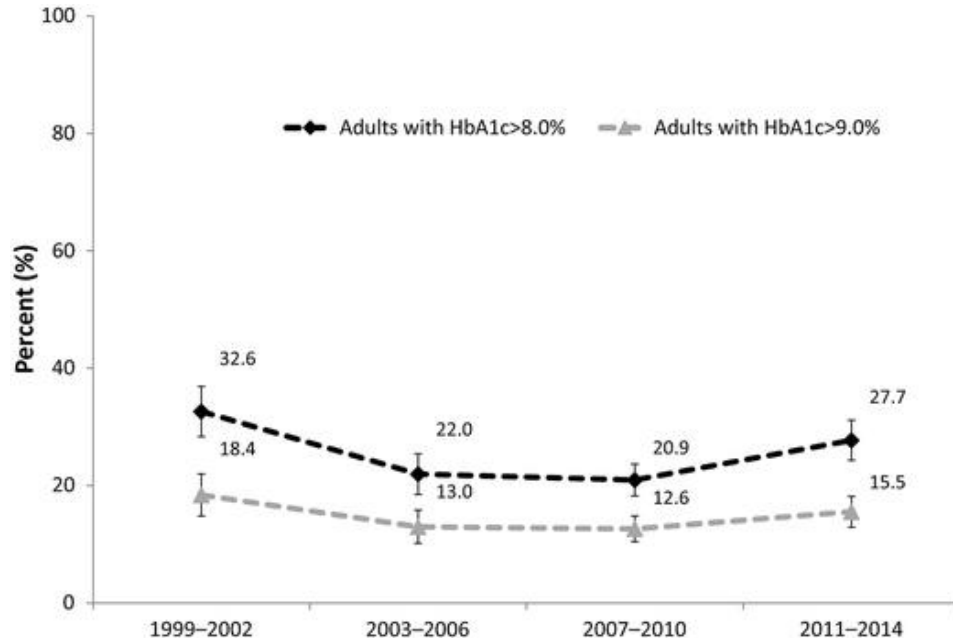
Clinical Inertia in Type 2 Diabetes: Glycemic Control Trends in the US 1999-2014



**Despite more than
40 new Type 2
diabetes treatment
options approved
since 2005**

Carls G. Huynh J. Tuttle et al. Achievement of Glycated Hemoglobin Goals in the US Remains Unchanged Through 2014. *Diabetes Ther* 2017;8:863-873.

Clinical Inertia in Type 2 Diabetes: Glycemic Control Trends in the US 1999-2014



**Percentage of
patients with A1c
>9% is increasing**

Carls G. Huynh J. Tuttle et al. Achievement of Glycated Hemoglobin Goals in the US Remains Unchanged Through 2014. *Diabetes Ther* 2017;8:863-873.

Clinical Inertia in Type 2 Diabetes: Treatment Intensification in Uncontrolled Patients

Retrospective cohort study of 11,525 adult patients with Type 2 diabetes in US insurance claims database

A1c $\geq 8\%$ after ≥ 3 months of therapy including metformin with mean A1c 9.1%

- 37% patients had their treatment intensified < 6 months
- 11% patients had their treatment intensified 6-12 months
- 52% patients did not have their treatment intensified < 12 months

Fu, A. Z. and Sheehan, J. J. (2016), Treatment intensification for patients with type 2 diabetes and poor glycaemic control. *Diabetes Obes Metab*, 18: 892-898.



-
- Established in 1963 by 10 physicians and has since grown to one of the largest physician-owned multi-specialty clinics in the Southeast U.S.
 - 455 providers (285 physicians and 170 mid-level providers)
 - 50 specialties
 - 72 locations Service a market area of approximately 525K patients
 - Over 871,000 outpatient visits in 2018, excluding dialysis
 - Epic EMR since 2011

HBC's Quality Initiatives

67 MILLION

American adults have
high blood pressure

1 IN 3



High blood pressure
contributes to

~1,000
DEATHS/DAY



1 in 3 adults with hypertension do not know
they have this disease



ONLY ABOUT HALF

of people with high blood pressure
have their condition under control

HBC's Quality Initiatives

When your blood pressure is **high**:

You are **4x** more likely to die from a stroke



You are **3x** more likely to die from heart disease



of people who have a first heart attack...



of people who have a first stroke...



of people with chronic heart failure...

**HAVE
HIGH
BLOOD
PRESSURE**

Annual estimated costs associated with high blood pressure:



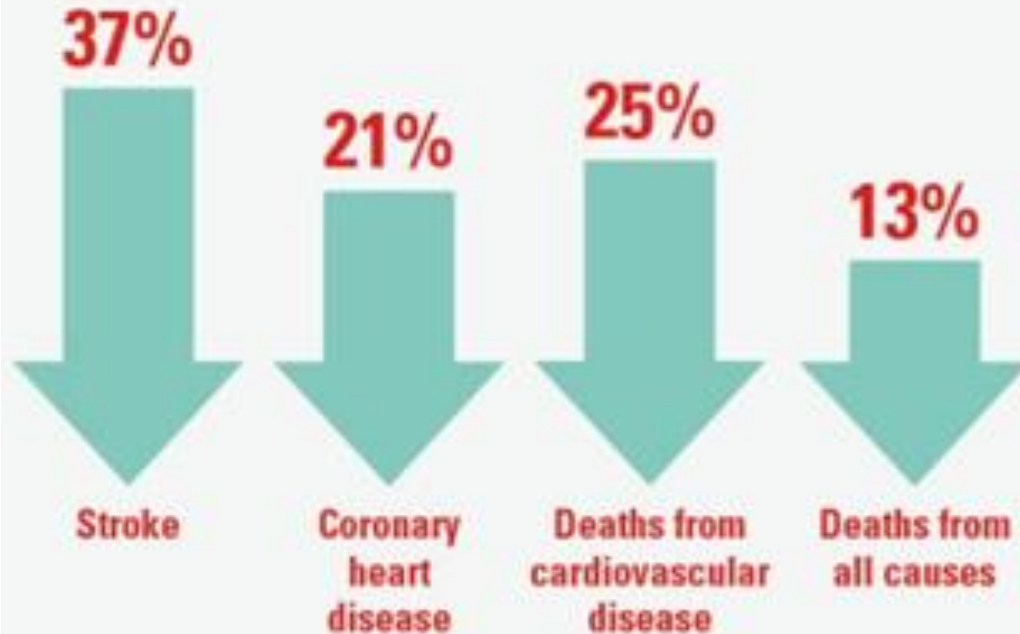
\$51 BILLION

\$47.5 BILLION
in direct medical expenses



HBC's Quality Initiatives

Reducing average population systolic blood pressure by only 12–13 mmHg could reduce:



The Good News ...

Association of systolic blood pressure with macrovascular and microvascular complications of type 2 diabetes (UKPDS 36): prospective observational study

BMJ 2000; 321

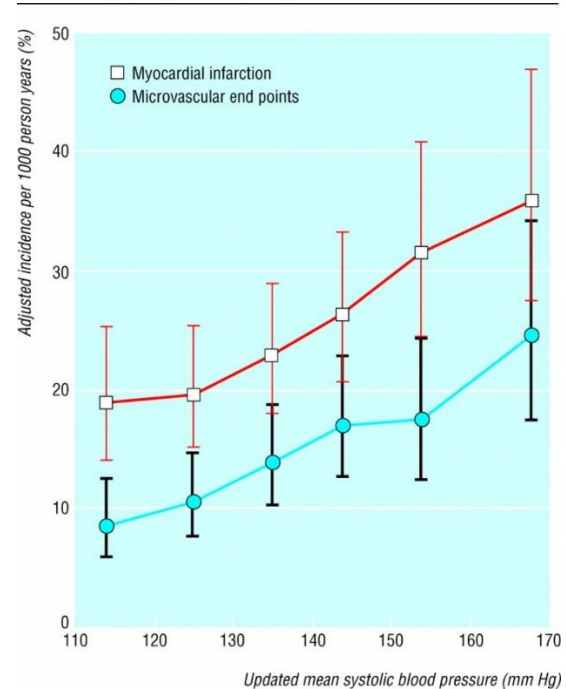
For every 10 mm Hg reduction in SBP:

12% Decrease in any end point related to diabetes

15% Reduction in risk of death related to diabetes

11% Decrease in MI

13% Decrease in microvascular complications



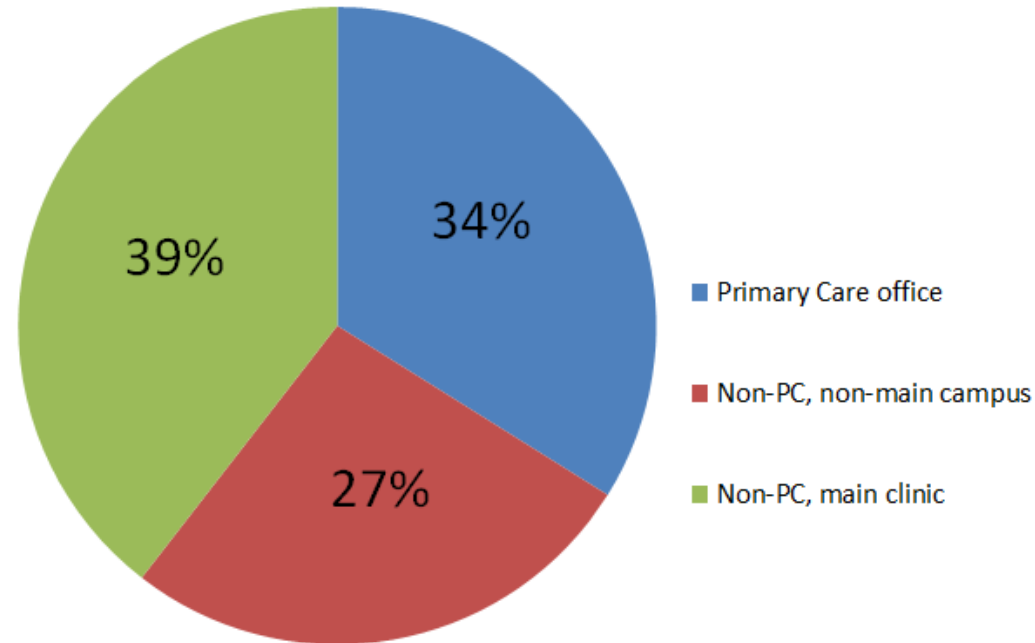
HBC's Quality Initiatives

Proportion of Patients with HTN whose Blood Pressure is in Control (140/90)

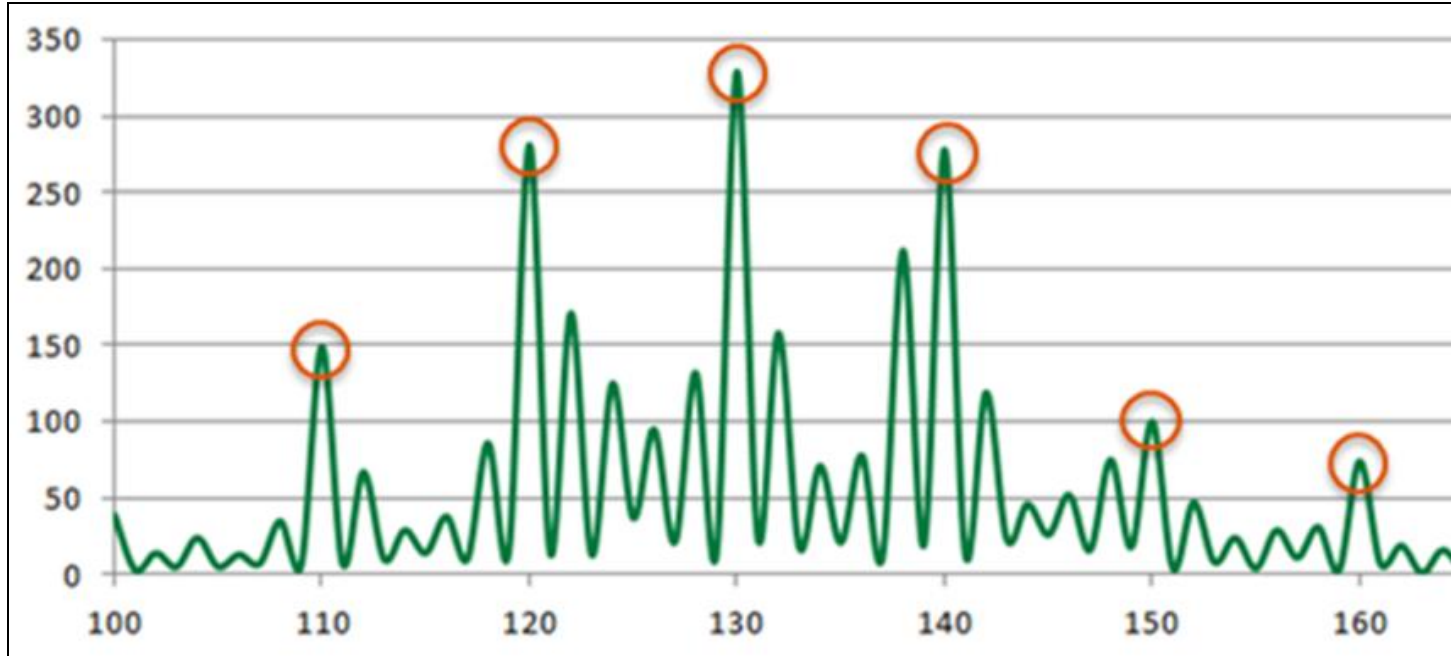


HBC's Quality Initiatives

An evaluation of the where the last 5,000 BPs >140/90 were recorded throughout the organization:



HBC's Quality Initiatives



Standardized Blood Pressure Measurement Process



Sources: Pickering, et al. *Circulation*, 2005 and O'Brien, et al. *J Hypertens*, 2003

HBC's Quality Initiatives

Standardized blood pressure measurement process

Before:

5/31/2016 visit with Hbc

- Snapshot
- Chart Review
- Review Flows...
- Results Review
- Synopsis
- Medications
- Immunizations
- Order Entry
- MAR
- Enter/Edit Res...
- Communicatio...
- Visit Navigator

- Images
- Reference
- CHARTING
- Visit Info
- Vital Signs**
- Allergies
- Verify Rx Benefits
- Medications
- Hearing/Vision
- History
- Goals
- Progress Notes
- ORDERS
- BestPractice
- SmartSets
- Visit Diagnoses
- Meds & Orders

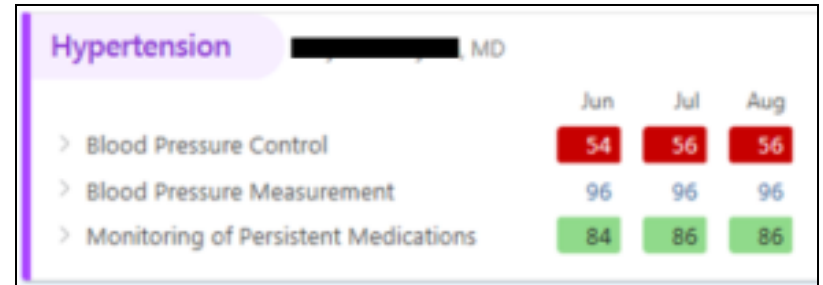
After:

5/31/2016 visit with Hbc

- Snapshot
- Chart Review
- Review Flows...
- Results Review
- Synopsis
- Medications
- Immunizations
- Order Entry
- MAR
- Enter/Edit Res...
- Communicatio...
- Visit Navigator

- Images
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- Hearing/Vision
- History
- Vital Signs**
- Goals
- Progress Notes
- ORDERS
- BestPractice
- SmartSets
- Visit Diagnoses
- Meds & Orders

Provider specific blood pressure management dashboards



healthy planet **QuIP: Hypertension**

Foundation of initiative begins with organization-wide education and consistency regarding proper equipment and blood pressure measurement technique

Undiagnosed hypertension

BP 120-139 / 80-89

BP 140-159 / 90

1st time 2nd time

BP should be rechecked within 1 year and patient should be given information on DASH eating plan, exercise, and healthy BMI

BP should be rechecked within 4 weeks and patient should be given information on DASH eating plan, exercise, and healthy BMI

Therapy should be initiated or patient referred to PCP and seen in 2-3 weeks and patient should be given information on DASH eating plan, exercise, and healthy BMI

Uncontrolled hypertension (>140/90)

Elevated BP found in office where HTN is treated

Elevated BP found in office that does not treat HTN

Refer to Hypertension 101 for treatment recommendations

Patient does not have HBC PCP

Patient has HBC PCP

Arrange I/U appt with

No PCP listed within 5000

Refer HBC PCP list within 5000

Hypertension 101

Steps 1-3 Most patients should be placed on some combination of an ACEI/ARB (i.e. lisinopril or losartan), a thiazide-type diuretic (i.e. hydrochlorothiazide or chlorthalidone), and DHP CCB (i.e. amlodipine). The combination of these three drug classes may be patient-specific based on comorbidities.

Thiazide Diuretic considerations:

- Use cautiously in patients with severe renal insufficiency or hypokalemia

ACEI/ARB considerations:

- Monitor K and creatinine with initiation of therapy
- Thiazide diuretic + ACEI/ARB + DHP CCB will cause hypotension in patients with hypotension
- Thiazide diuretic + ACEI/ARB + DHP CCB will cause hypotension in patients with hypotension
- Thiazide diuretic + ACEI/ARB + DHP CCB will cause hypotension in patients with hypotension

DHP CCB considerations:

- Monitor K and creatinine with initiation of therapy
- Thiazide diuretic + ACEI/ARB + DHP CCB will cause hypotension in patients with hypotension
- Thiazide diuretic + ACEI/ARB + DHP CCB will cause hypotension in patients with hypotension
- Thiazide diuretic + ACEI/ARB + DHP CCB will cause hypotension in patients with hypotension

Step 4: Non-selective beta blocker (i.e. carvedilol or labetalol)

- Should be considered earlier than of use in patients with history of CAD and/or EF <40%
- Monitor for bradycardia
- Use cautiously in patients with history of reactive airway disease

Step 5: Aldosterone blocker (i.e. spironolactone or eplerenone) – contraindicated in pregnancy

- If patient's potassium is <4 and CCl- >125, consider checking an aldosterone retest prior to initiation of an aldosterone blocker to evaluate for hyperaldosteronism
- Potassium and creatinine must be monitored regularly when using aldosterone blockade
- Counsel men about the possibility of gynecomastia with spironolactone; eplerenone is an alternative for men who develop this side effect

DOs:

- Target CAC/0 in most patients and have them return every 24 weeks for 10 years until goal is reached
- Assess adherence diligently, especially when BP is elevated
- Optimize all combination drugs to improve adherence
- Consider sleep apnea in patients with symptoms
- Track energy
- Have patients eliminate NSAIDs, COX-2s, decongestants
- Discourage and encourage a low sodium diet (DASH), exercise, healthy BMI, reduce FTO
- Assess renal function, electrolytes and mineral/vitamin levels

Don'ts:

- Never withhold DHP to be used in the office or at a patient's home
- Use a patient's home reading unless their cuff has been checked in the office
- Assume office readings by a nurse are accurate, repeat if inconsistent with prior and home readings
- Use Candesartan prior to BP (low therapy)
- Change a regimen based on a single reading; evaluate trends and discuss therapy PRACTICE

Hypertension 101

Medications – monotherapy options

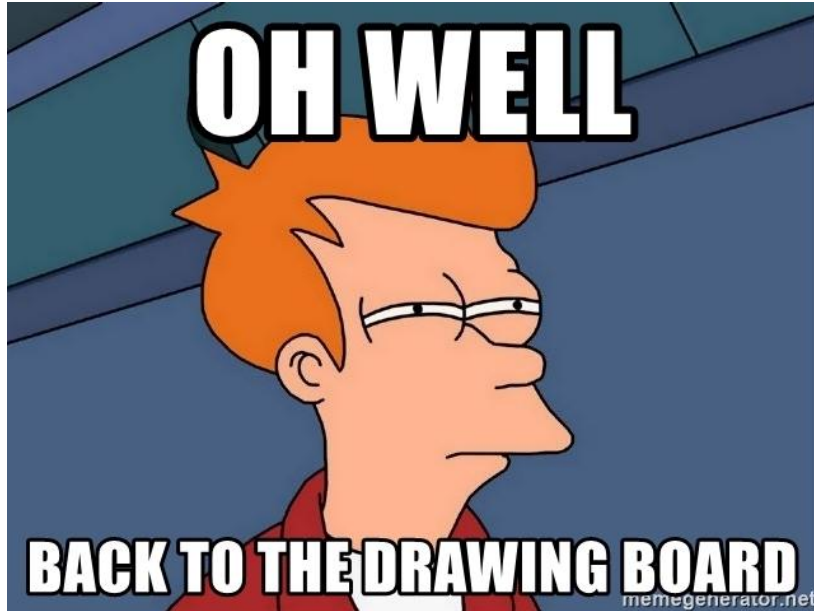
| | Drug Name (qd unless otherwise noted) | Starting Dose (mg) | Maximum Dose (mg) | Notes |
|---|--|--------------------|-------------------|---|
| ACEI or ARB | Lisinopril (<i>Zestril, Zestrin</i>)* | 10 - 20 | 40 bid | Start at 10 mg for elderly and CKD patients |
| | Benzapril (<i>Lotensin</i>)* | 10 - 20 | 40 bid | |
| | Losartan (<i>Cosart</i>) | 50 | 100 | Lowers uric acid |
| | Valsartan (<i>Diovan</i>) | 80 | 320 | |
| Thiazide Diuretic | Chlorthalidone (<i>Thalitone</i>) | 25 | 25 | Can cut into half tablet for 12.5 mg |
| | Hydrochlorothiazide (HCTZ)* | 12.5 | 25 | Shorter half-life than Chlorthalidone |
| | Indapamide (<i>Lozol, Lozole</i>)* | 1.25 | 2.5 | For patients with significant glycemic issues |
| DHP Calcium Channel Blocker | Amlodipine (<i>Norvasc</i>) | 2.5 - 5 | 10 | Do not use Simvastatin with CCBs |
| | Felodipine (<i>Piendil</i>) | 2.5 - 5 | 10 | |
| selective beta blocker not use if patient on other rate-limiting agent | Carvedilol (<i>Coreg</i>)* | 6.25 bid | 25 bid | Watch for bradycardia, wheezing |
| | Labetalol (<i>Trandate</i>) | 100 bid | 800 t.i.d. | |
| If BP is not controlled on a compliant combination of all 3 drug classes above, add a fourth agent | | | | |
| sterone Antagonist and creatinine must be monitored regularly (3-4 es/year even if normal) | Spironolactone (<i>Aldactone</i>)* | 25 | 100 | Warn about gynecomastia |
| | Eplerenone (<i>Inspira</i>) | 25 | 50 | If gynecomastia present |
| If BP is not controlled on a compliant combination of all 4 drug classes above, add a fifth agent | | | | |
| Combination Therapy options for Steps 1-3 (this is not an all-inclusive list) | | | | |
| combination may be as first-line therapy | Amlodipine/ Benazepril (<i>Lotrel</i>) | 2.5/10 | 10/40 | 5/10, 5/20, 5/40, & 10/20 also |
| | Enalapril/HCTZ (<i>Vasotec</i>)* | 5/12.5 | 20/25 | Enalapril max dose 40mg |
| | Lisinopril/HCTZ (<i>Priapride Zestoretic</i>)* | 20/12.5 | 20/25 | May use two 10/12.5 |
| | Losartan/HCTZ (<i>Hyzoar</i>) | 50/12.5 | 100/25 | 100/12.5 also available |
| | Valsartan/HCTZ (<i>DiovanHCT</i>) | 80/12.5 | 320/25 | 160/12.5, 160/25, & 320/12.5 |
| | Amlodipine/Valsartan (<i>Exforge</i>) | 5/80 | 5/160 | May use two 5/160 |

Notes: lowest-cost alternatives for cash-pay at most pharmacies; refer to pharmacy-specific drug lists in Epic for further details

CLOSE THE GAPS



HYPERTENSION



Results ?

74%

of patients who were found to have an elevated blood pressure in a non-treating provider's office were scheduled an appointment with a treating provider within 4 weeks

Improvement in
blood pressure
control rate:

2%

All primary care providers have been given their “BP audits”

Data provided:

- MRNs and visit dates where BP high
- Overall control rate %
- Rank among all PCPs
- Meds changed when BP high %
- F/U scheduled within 4 wks %
- Number of meds prescribed
- Number of maxed out meds prescribed

Findings:

Control rate ranged from 42.6% to 74.6%
Higher performing providers were:

- 3x more likely to titrate meds when BP was high
- 4x more likely to schedule f/u within 4 wks when BP was high
- More likely to use more meds (2.7 vs 2.1)

| Unit: n=17 PCP, MD | | 823 out of 1493 controlled (55.1%) | | | | | | | | | | Rank: #48 out of 81 (May 2017) | |
|--------------------|-----|------------------------------------|-----|-----|--------|----------|------------|-----------------|-----------------|----------------------------------|--|--------------------------------|--|
| MRN | Age | Date | SBP | DBP | Med Δ? | Other Δ? | 1 mon f/u? | Total # BP meds | # max'd BP meds | Comments | | | |
| | 80 | 6/30/2017 | 166 | 95 | No | No | No | 4 | 1 | Cough | | | |
| | | 4/25/2017 | 157 | 75 | No | No | No | | | Back pain | | | |
| | | 3/27/2017 | 160 | 88 | No | No | Yes | | | | | | |
| | 45 | 6/30/2017 | 140 | 88 | Yes | No | No | 3 | 1 | | | | |
| | | 3/31/2017 | 145 | 89 | Yes | Yes | No | | | | | | |
| | | 12/16/2016 | 150 | 98 | No | Yes | Yes | | | | | | |
| | 34 | 6/30/2017 | 139 | 101 | Yes | No | Yes | 1 | 0 | | | | |
| | | 12/22/2016 | 141 | 97 | No | Yes | Yes | | | | | | |
| | | 6/17/2016 | 130 | 96 | No | No | No | | | | | | |
| | 69 | 6/30/2017 | 153 | 79 | No | No | Yes | 3 | 1 | | | | |
| | | 6/9/2017 | 146 | 73 | No | No | No | | | | | | |
| | | 5/22/2017 | 129 | 72 | | | | | | | | | |
| | 64 | 6/30/2017 | 143 | 74 | No | Yes | No | 3 | 3 | | | | |
| | | 6/16/2017 | 133 | 67 | | | | | | | | | |
| | | 9/23/2016 | 123 | 75 | | | | | | | | | |
| | 52 | 6/30/2017 | 152 | 92 | Yes | No | Yes | 2 | 1 | | | | |
| | | 4/27/2017 | 151 | 104 | No | No | No | | | Allergic rhinitis | | | |
| | | 3/24/2017 | 144 | 98 | Yes | No | No | | | | | | |
| | 70 | 6/30/2017 | 140 | 66 | No | No | No | 0 | 0 | HTN visit code - no HTN meds | | | |
| | | 1/31/2017 | 132 | 79 | | | | | | | | | |
| | | 6/9/2016 | 110 | 70 | | | | | | | | | |
| | 32 | 6/30/2017 | 136 | 92 | No | No | No | 0 | 0 | | | | |
| | | 4/7/2017 | 135 | 99 | No | No | No | | | | | | |
| | | 1/13/2017 | 140 | 94 | No | No | No | | | URI | | | |
| | 31 | 6/29/2017 | 149 | 87 | No | No | No | | | ADD - BP elevated with no HTN dx | | | |
| | | 11/2/2016 | 134 | 86 | | | | | | | | | |
| | | 8/2/2016 | 126 | 80 | | | | | | | | | |
| | 63 | 6/29/2017 | 148 | 69 | No | Yes | No | 2 | 1 | | | | |
| | | 1/3/2017 | 165 | 72 | Yes | Yes | Yes | | | | | | |
| | | 12/20/2016 | 156 | 80 | No | No | Yes | | | | | | |
| | 57 | 6/29/2017 | 165 | 92 | Yes | No | Yes | 3 | 0 | | | | |
| | | 4/4/2016 | 168 | 94 | No | Yes | Yes | | | | | | |
| | | 12/17/2015 | 136 | 82 | | | | | | | | | |
| | 71 | 6/29/2017 | 146 | 83 | No | No | No | 3 | 2 | "controlled at home" | | | |
| | | 3/20/2017 | 165 | 89 | No | No | Yes | | | Back pain | | | |
| | | 3/20/2017 | 165 | 89 | No | No | No | | | | | | |
| | 64 | 6/29/2017 | 142 | 85 | No | Yes | No | 1 | 1 | | | | |
| | | 2/2/2017 | 151 | 82 | No | No | No | | | | | | |
| | | 12/22/2016 | 155 | 97 | Yes | Yes | Yes | | | | | | |
| | 47 | 6/29/2017 | 129 | 95 | No | No | No | 1 | 0 | | | | |
| | | 5/30/2017 | 137 | 101 | Yes | Yes | Yes | | | HTN diagnosed at this visit | | | |
| | | 4/24/2017 | 155 | 104 | No | Yes | Yes | | | No prior HTN dx | | | |
| | 61 | 6/29/2017 | 151 | 90 | Yes | Yes | Yes | 2 | 0 | | | | |
| | | 4/1/2016 | 146 | 90 | Yes | Yes | Yes | | | | | | |
| | | 6/4/2015 | 160 | 98 | Yes | Yes | Yes | | | | | | |

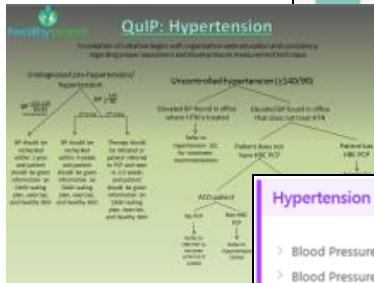
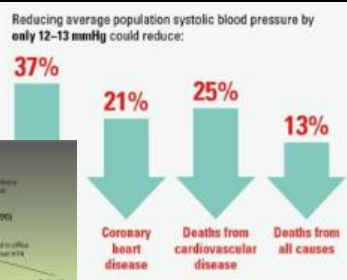
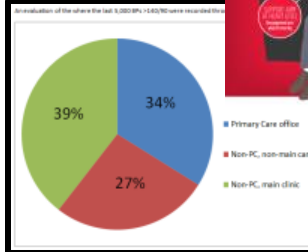
Meds changed when BP high: 12 of 37 (32.4%) 2.0 0.8
 F/U within 4 wks when BP high: 17 of 37 (45.9%)
 Comments: recs for pt to f/u some times but no visit actually scheduled; doses not being maximized

CLOSE THE GAPS



HYPERTENSION

Results ?



| Hypertension | MD | Jun | Jul | Aug |
|--|----|-----|-----|-----|
| > Blood Pressure Control | | 54 | 56 | 56 |
| > Blood Pressure Measurement | | 96 | 96 | 96 |
| > Monitoring of Persistent Medications | | 84 | 86 | 86 |

74%

of patients who were found to have an elevated blood pressure in a non-treating provider's office were scheduled an appointment with a treating provider within 4 weeks

Improvement in blood pressure control:

16%

Lessons Learned - How to Avoid Clinical Inertia

Provider education – guidelines are necessary but not sufficient

- Education on benefits, costs, and side effects of treating to target
- Address the complexity of treating to target for different disorders (glycemic control, hypertension, and dyslipidemia)

Structure our care delivery systems to facilitate management of chronic diseases

- Utilize electronic medical record systems, best practice advisories, flowsheets, and disease registries
- Expand the care team
- Active outreach and planned visits to increase opportunities for “titratable moments”

Provide performance feedback

- Dashboards and audits – timely and specific
- Chart review with face-to-face peer feedback

March Webinar

- **Date/Time:** March 21, 2019 from 2-3pm Eastern
- **Topic:** Overcoming Barriers to Diabetes Self-Management Education (DSME) Referrals
- **Presenters:**
 - Jodi Lavin-Tompkins, M.S.N., R.N., CDE, BC-ADM (American Association of Diabetes Educators)
 - Valerie Spier, M.P.H., R.D., CDE (Sutter Health)



Questions

