



Measure Up  
Pressure Down  
Campaign –  
Addressing all 8  
Planks!

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Chief Transformation Officer

# Problem Statement: Hypertension

## Performance- Baseline

- Costs to the nation due to high blood pressure are estimated at \$131 billion in health care services, medications and missed days of work.
- Cornerstone seeks to provide excellent care, achieve better outcomes, reduce costs, and share in those savings
- Cornerstone initial performance 51.5% in control 😞



# 80% of Patients at Goal Blood Pressure

## Processes to Achieve Goal

Direct Care Staff  
trained in  
accurate BP  
measurement

Hypertension  
Guideline used  
and adherence  
monitored

BP addressed for  
every  
hypertension  
patient, every  
primary care visit

All patients not at  
goal and with  
new Rx seen  
within 30 days

Prevention,  
engagement, and  
self-management  
program in place

Registry used  
to identify and  
track  
hypertension  
patients

All team  
members trained  
in importance of  
BP goals

All specialties  
intervene with  
patients not in  
control

# Planck 1

## Trained in Accurate BP Measurement

- Education training for all staff
- New employee training
- Quizzes after each training session
- Re-test in 1 year



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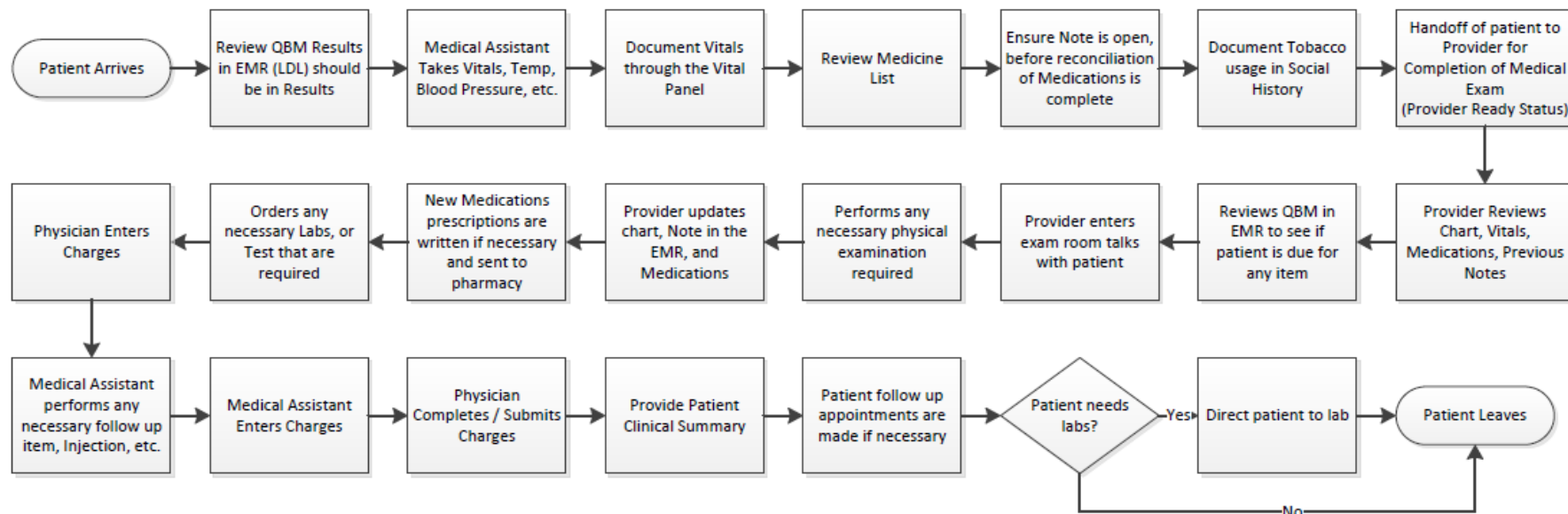
# Plank 2

## HTN Guidelines

- Clinical Pathway
- Pathway utilization reports



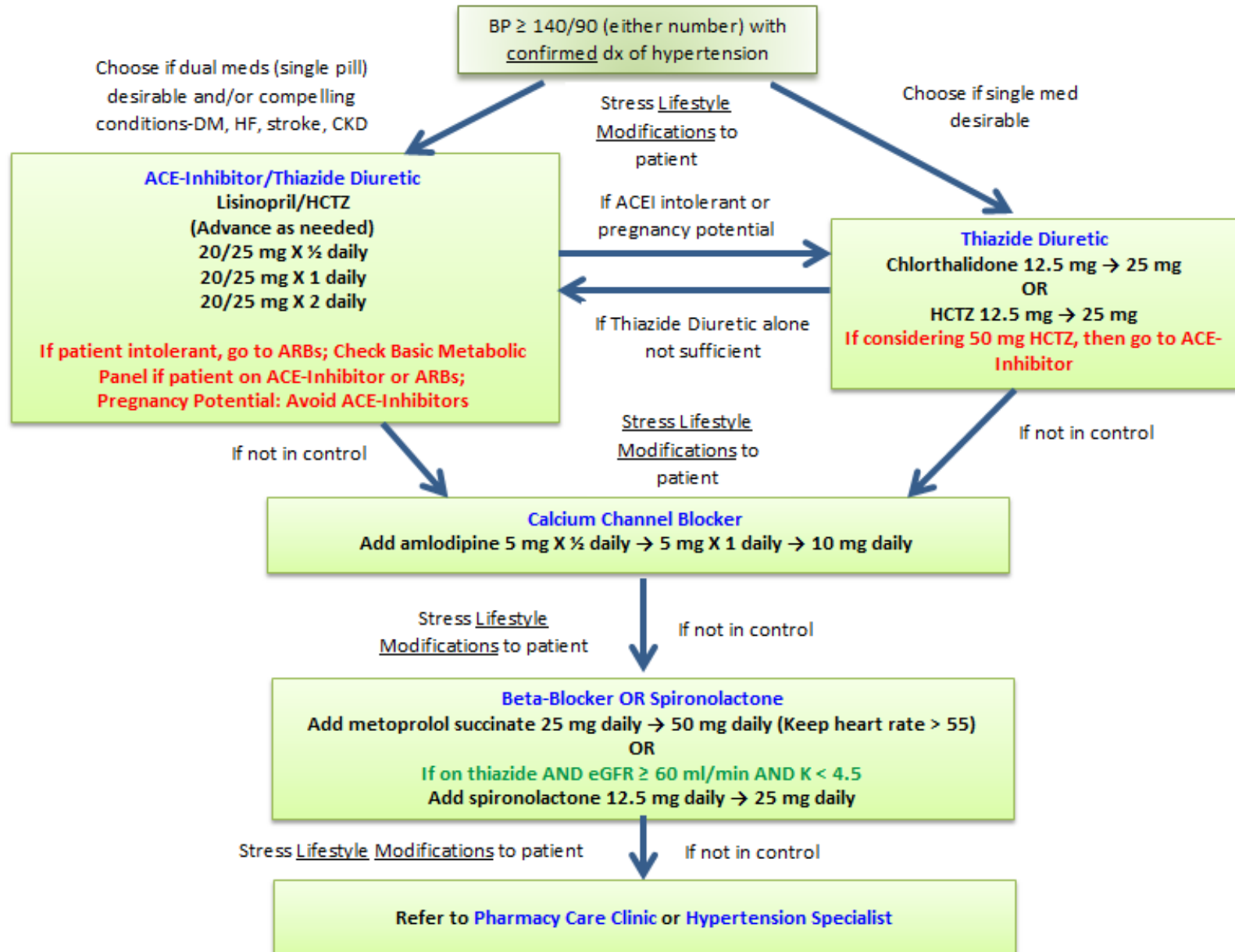
PTE Measures Process Flow  
7/23/2013  
Hypertension Bundle



Disclosures:

1. Process flow assumes establish patient with current diagnose of Hypertension.
2. Workflow doesn't include all decision points, each process contains decisions that must be made to provide excellence patient care.

# Cornerstone Health Care Hypertension Pathway



# Hypertension Care Guide

Other Problems			
	Esophageal achalasia	530.0	K22.0
	Hyperlipidemia	272.4	E78.5
	Hypertension	401.9	I10
	Obesity	278.00	E66.9
	Simple chronic bronchitis	491.0	J41.0
	Uncontrolled type 2 diabetes...	250.92	E11.8

Navigation bar: New | My Priority | Refine | Convert | CareGuide: CHC Hypertension

**CHC Hypertension, Essential**

Send To Retail: CHC Test Pharmacy

To Be Done: To Be Performed

Rx | Med Admin | Order | FU/Ref | Instruct

Name
CHC Hypertension Care Pathway Narrative CHC Guideline
Thiazide Diuretics
Chlorthalidone 25 MG Oral Tablet
Hydrochlorothiazide 12.5 MG Oral Tablet
ACE Inhibitor/Thiazide Diuretic Combination
Lisinopril-Hydrochlorothiazide 20-25 MG Oral Tablet
ACE Inhibitors
Ramipril 2.5 MG Oral Capsule
Enalapril Maleate 5 MG Oral Tablet
Lisinopril 10 MG Oral Tablet
Angiotensin II Receptor Antagonists
Losartan Potassium 50 MG Oral Tablet
Calcium Channel Blocker
Amlodipine Besylate 5 MG Oral Tablet
Beta-Blocker/Spirolactone
Spirolactone 50 MG Oral Tablet
Metoprolol Succinate ER 25 MG Oral Tablet Extended Release 24 Hour



## Rx

- CHC Hypertension Care Pathway Narrative  
CHC Guideline
- Thiazide Diuretics
  - Chlorthalidone 25 MG Oral Tablet
  - Hydrochlorothiazide 12.5 MG Oral Tablet
- ACE Inhibitor/Thiazide Diuretic Combination
  - Lisinopril-Hydrochlorothiazide 20-25 MG Oral Tablet
- ACE Inhibitors
  - Ramipril 2.5 MG Oral Capsule
  - Enalapril Maleate 5 MG Oral Tablet
  - Lisinopril 10 MG Oral Tablet
- Angiotensin II Receptor Antagonists
  - Losartan Potassium 50 MG Oral Tablet
- Calcium Channel Blocker
  - AmLODIPine Besylate 5 MG Oral Tablet
- Beta-Blocker/Spirololactone
  - Spirololactone 50 MG Oral Tablet
  - Metoprolol Succinate ER 25 MG Oral Tablet Extended Release 24 Hour

## CareGuide Guidelines

### CHC Hypertension Care Pathway Narrative

#### Enterprise Guidelines

- \*This Pathway is for patients with CONFIRMED diagnosis of hypertension (2 successive episodes of elevated systolic or diastolic BP. BP greater than or equal to 140/90).
- \*Stress LIFESTYLE MODIFICATIONS whenever BP is not in control. Per current JNC report, lifestyle modifications must include one or more of the following: Weight Reduction, DASH Eating Plan, Dietary Sodium Restriction, Increased Physical Activity or Moderation in Alcohol Consumption.
- \*Begin with either a Single Medication or Dual Medication (in single pill format). The decision is up to the provider, but it is recommended that consideration be given to initiating dual medications as the majority of patients will need that. Dual medications in single pill form are also recommended as compliance is better than for multiple-pill regimens. The dual medication (single pill) regimen is also recommended for patients with compelling conditions such as diabetes, heart failure, stroke, or chronic kidney disease.
- \*If Single Medication desirable, start with a thiazide diuretic.
- \*If Dual Medication (single pill) desirable AND/OR compelling conditions are present (DM, HF, stroke, CKD), start patient on an ACE-Inhibitor with Thiazide Diuretic.
- \*If Single Medication desirable and not controlled with a thiazide diuretic, switch to an ACE Inhibitor.
- \*If Single Medication desirable and not controlled with a thiazide diuretic and patient is ACE Inhibitor intolerant, switch to an ARB.
- \*ADD Calcium Channel Blocker to above current therapy if not in control with above therapy (two pill therapy).
- \*ADD Beta-Blocker OR Spirololactone to above current therapy if not in control with above therapy (three pill therapy).

Close



## Thiazide Diuretics

### Enterprise Guidelines

If Single Medication desirable, start with a thiazide diuretic. Start Chlorthalidone 12.5 mg (can be increased to 25 mg) OR start Hydrochlorothiazide 12.5 mg (can be increased to 25 mg). If a single medication is not effective or if considering going to 50 mg HCTZ, then go to an ACE-Inhibitor or dual medication (single pill) regimen.

					Orders
					<input type="checkbox"/> Labs (Check BMP if patient on ACE-Inhibitor or ARB)
					Venipuncture
					BMP
					<input type="checkbox"/> Follow-ups and Referrals
					<input type="checkbox"/> Referrals
					Cardiology Consult
					Nephrology Consult
					<input type="checkbox"/> Instructions
					<input type="checkbox"/> Activity
					Exercise, aerobic (Begin or continue regular aerobic exercise. Gradually work...
					Exercise, aerobic, limited (Begin a limited exercise program.)
					<input type="checkbox"/> Diet
					Diet, DASH (We want to put you on the DASH diet for 2000 calories.)
					Diet, hypertension (A diet low in sodium and high in potassium, magnesium,...
					Diet, low sodium (Restrict the salt in your diet by avoiding highly salted foods.)
					Diet, low sodium, specified (Restrict your sodium (salt) intake to 4 grams per...
					Eating habits, change slowly (We recommend that you change your eating...
					<input type="checkbox"/> Home Monitoring
					Blood pressure, check (Take your blood pressure once a day. Record the...
					<input type="checkbox"/> Lifestyle Modifications

# Plank 3

## BP Addressed at Every Visit

- JNC 8
- 140/90 NQF18
- HTN patients flagged in EMR
- Pre-Visit planning worksheet





## Pre-Visit Planning Worksheet

Name: Doe, John	Provider: Marcus Welby, MD
MRN: 111111111	Appt Date/Time: 4/24/2014 9:00:00 AM
Reason for Visit: SORE THROAT	

### Notes from previous 1 - 2 OV's:

#### General Info:

#### Lab results:

HGB A1C	Microalbumin	LDL	TSH	Glucose			
5.4		104	1.44	0			
12/02/2013		11/26/2013	11/26/2013	11/26/2013			

#### Referrals:

### Active Tasks:

### QBM items needing to be addressed:

BP Screen Follow-Up Plan  
Folic Acid or Multivitamin

### Vitals:

Weight	Height	BMI	Temp	BP	Pulse/O2	Resp	LMP
137	64	23.52		104 / 72			
02/14/2014	02/14/2014	02/14/2014		02/14/2014			

#### Additional Notes:



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# Plank 4

## All New HTN Patients Seen Within 30 Days

- Barriers experienced
- Push back from physicians
- Lack of PCA bandwidth



# Plank 5

## Prevention, Engagement & Self-Management Programs

- Patient lifestyle and diet education
- Free blood pressure clinics
- Education handouts
- Video and slides for both patient and staff on obtaining accurate blood pressure





# Success Stories...

**Employer Health Fair** – An employee that was a diabetic began to feel weak and dizzy. He had tried to see the company nurse but she was unavailable. When he came to the health fair, he was pale and clammy and one of the employer's staff ask if we could help. Gezelle, an LPN, was able to work with the employee and determine that he needed to seek medical attention. Unfortunately she did not have a glucometer to take his blood sugar level, but his blood pressure was over 222/102. Based on Gazelle's assessment, and his prior health history, he took her advice and was transported to his medical provider via a co-worker. We will follow-up with the employer today to check on this employee and even though he was not a Cornerstone patient, we will offer Cornerstone services for his future healthcare needs.



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# Success Stories...

**Employer Health Fair** - We had one employee that had her blood pressure taken and it was high. She wasn't real happy with the results and gave us several reasons why it could be elevated. This is a common occurrence from people, almost like a defense mechanism, that it must be some other reason causing this problem and it probably will just go away. Later at the event this same woman stopped Gezelle in the hall and told her she had thought about what Gezelle had said. So after she had gone back to her office she went ahead and called her PCP to make an appointment for the following week. This is a good example of how these events can have positive effects on people's lives and health, even if they don't take full advantage of our scheduling service during the actual event. The marketing materials with all the Providers listed and the phone numbers are being put to good use.





# Plank 6

## HTN Registry Used

- Registry generated though EMR system
- Future endeavors
  - PCAs to reach out to patients who have not been seen
  - Target practices who have a high HTN population



Hide VTB

Hide VTB  
Daily Prov Schedule Clinical Desktop Note Task List Worklist Documents Enc Form Diagnosis Visit Charges Proc Charges Pt Appts

[R] Chctest, Eeyore

MRN: 3873420  
DOB: 01/18/1985  
Age: 28 Years

Sex: M  
AKA: Mike  
Allergies: Med & NonMed

H Phone: (336)288-5454  
W Phone: (336)951-8855  
QBM: STOP

PCP: Jobe, Daniel  
Usual Prov:  
Security: Break Glass

FYI: FYI  
Note: Select  
Pri Ins: MO Secure Horizon

Select Patient

CHC Adult Patient Registry Manager - Patient:DetailsBasic - Windows Internet Explorer

See FYI; Lat

Problems

Active Problem

### Patient

MRN: 3873420

Patient ID: 726342

Last Name: Chctest

First Name: Eeyore

DOB: 1/18/1985

### List of Enrollments

Registry

Enrolled

Discharged

Patient Expired

CHC.PatientRegistryManager.Web Version: 2.0.0.0

# PTE Metrics: QBM

Daily Prov Schedule Clinical Desktop Note Task List Worklist Documents Enc Form Diagnosis Visit Charges Proc Charges Pt Appts

**[R] Chctest, Eeyore** MRN: 3873420 Sex: M H Phone: (336)288-5454 PCP: Jobe, Daniel FYI: FYI  
DOB: 01/18/1985 AKA: Mike W Phone: (336)951-8855 Usual Prov: Note: Select  
Age: 28 Years Allergies: Med & NonMed QBM: STOP Security: Break Glass Pri Ins: MO Secure Horizons By UHC

Select Patient▼ i - ⚠

CHC Adult Patient View Patient Registry

Commit Pat Loc Status

See FYI; Latex Allergy, No BP in left arm

Problems Meds Allergies Orders Results

Active Problems My Priority

	Name	ICD-9	ICD-10	Managed By
<b>My Priority</b>				
<b>Health Maintenance/Risks</b>				
	Health Maintenance	V70.0	Z00.00	
<b>Other Problems</b>				
	Abdominal pain	789.00	R10.9	
	Abnormal menses	626.9	N92.6	

Chart HMP Vitals Flowsheets Immun

CHC Section by Sub-Section None

308 of 739 Chart Items (33 Invalid and 398 Audit Items)

Notes

Office Notes

- 03-GI Acute Care - Test, Provider P; Enc: 12Sep2013 - Appointment -
- 01-OV Acute Care - Test, Provider P; Enc: 11Sep2013 - Appointment -
- 02-OV Chronic Care - Rice, Katina; Enc: 10Sep2013 - AUDIT - Rice, K
- 05-OV New Patient - Rice, Katina; Enc: 10Sep2013 - AUDIT - Rice, K
- 02-OV Chronic Care - Rice, Katina; Enc: 10Sep2013 - AUDIT - Rice, K

# QBM

al Desktop | Note | Task List | Worklist | Documents | Enc Form | Diagnosis | Visit Charges | Proc Charges | Pt Appts

MRN: 3873420 | Sex: M | H Phone: (336)288-5454 | PCP: Jobe, Daniel | FYI: FYI  
 DOB: 01/18/1985 | AKA: Mike | W Phone: (336)951-8855 | Usual Prov: | Notes: (Select)

QBM - Eeyore Chctest/Age 28 -- Webpage Dialog

MSSP | Report A QBM Problem | Print for Patient

### HMP

Item	Freq	Last
none: Encounter for preventive health examination		
Colonoscopy	10 years	04-23-12
Miscellaneous	1 month	
Screening Mammogram Bilateral	1 year	

### QBM

Metric	Result Date	Due Date	Status	Result	In Range	Note
<b>Diabetes Mellitus</b>						
<a href="#">Aspirin/Anti-Coagulant Use</a>	08-06-13	02-11-23			0.0	Defer <a href="#">i</a>
<a href="#">Dilated Retinal Eye Exam</a>			●			Defer <a href="#">i</a>
<a href="#">Foot Exam</a>			●			Defer <a href="#">i</a>
<a href="#">Hemoglobin A1C</a>			●			Defer <a href="#">i</a>
<a href="#">LDL-C (Diabetes)</a>	10-19-12	10-19-13	✓		0.0	Defer <a href="#">i</a>
<a href="#">Microalbumin</a>			●			Defer <a href="#">i</a>
<b>Prevention</b>						
<a href="#">Blood Pressure - Diastolic</a>	09-03-13	09-03-14	✓		80.0	Defer <a href="#">i</a>
<a href="#">Blood Pressure - Systolic</a>	09-03-13	09-03-14	✓		110.0	Defer <a href="#">i</a>
<a href="#">BMI Follow-up Plan (age 18-64)</a>	07-09-13	01-05-14	✓		0.0	↓ Defer <a href="#">i</a>
<a href="#">BMI Screening (age 18-64)</a>	09-03-13	03-02-14	✓		32.9	↑ Defer <a href="#">i</a>
<a href="#">Depression Screen Follow Up</a>			●			Defer <a href="#">i</a>
<a href="#">Depression Screening</a>	09-10-13	09-10-14	✓		10.0	↑ Defer <a href="#">i</a>
<a href="#">Influenza Vaccine</a>	08-01-13		✓	(Seasonal Metric)		Defer <a href="#">i</a>
<a href="#">Tetanus (Td)</a>	09-11-13	09-11-23	✓		0.0	Defer <a href="#">i</a>

12Sep2013 - Appointment  
 11Sep2013 - Appointment  
 10Sep2013 - AUDIT - Ric  
 0Sep2013 - AUDIT - Ric  
 10Sep2013 - AUDIT - Ric  
 10Sep2013 - AUDIT - Ric  
 09Sep2013 - Office Enc  
 E R; Enc: 08Sep2013 - A  
 03Sep2013 - Appointm  
 Enc: 28Aug2013 - Office  
 g2013 - Office Encounte  
 AHS; Enc: 27Aug2013 - I  
 ic: 26Aug2013 - Non-App  
 Crystal; Enc: 22Aug2013  
 AHS; Enc: 21Aug2013 - A  
 inc: 20Aug2013 - Office E  
 AHS; Enc: 20Aug2013 - C  
 inc: 19Aug2013 - Other -  
 19Aug2013 - Office Enc  
 16Aug2013 - Office Enc  
 c: 16Aug2013 - Office E  
 Enc: 14Aug2013 - Appoi  
 Enc: 14Aug2013 - Appo  
 p; Enc: 13Aug2013 - App  
 13Aug2013 - Office Enc  
 r P; Enc: 13Aug2013 - In  
 p: 12Aug2013 - Other - Te  
 Enc: 12Aug2013 - Other -  
 07Aug2013 - Appointm

imageAccess

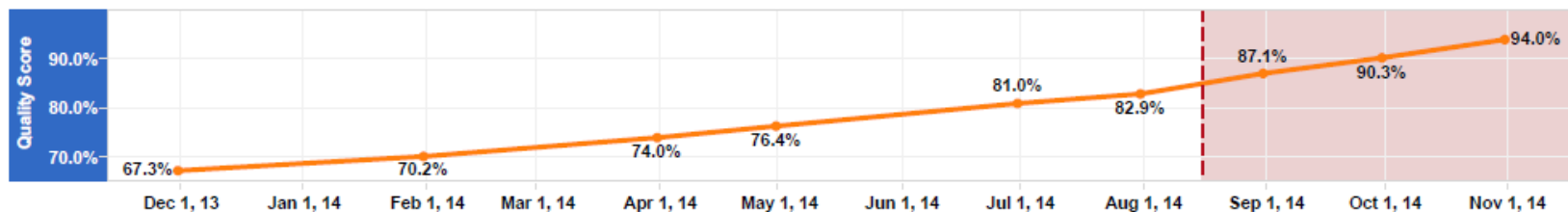
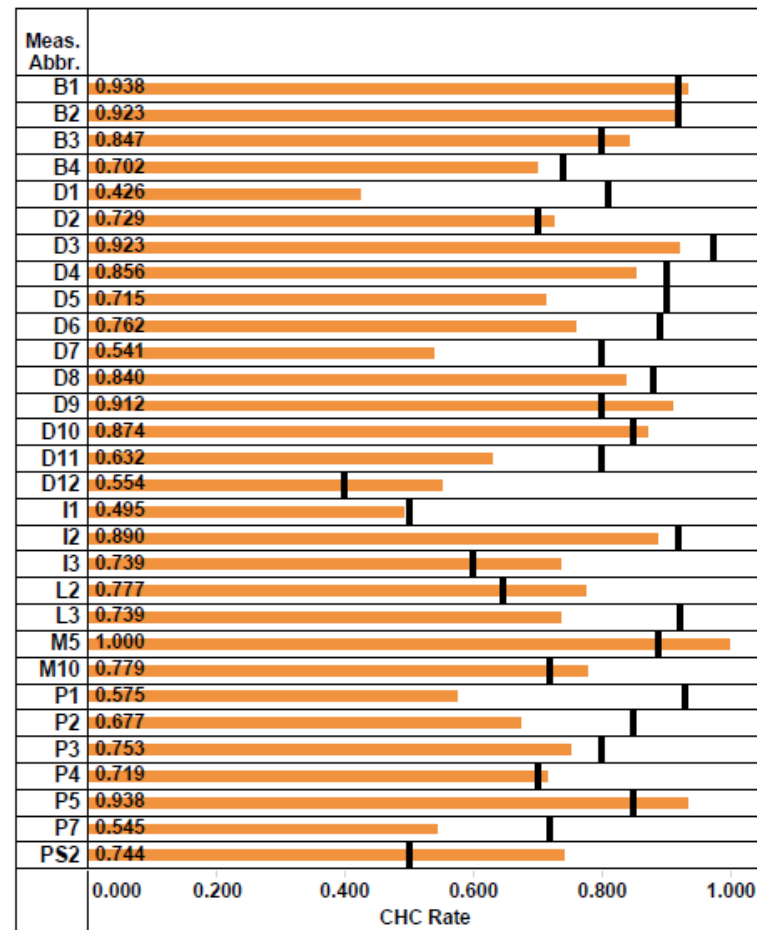
http://wr-prdwebcis02/QIS\_StopLight/Default.aspx?user: Local intranet | Protected Mode: Off



# Cornerstone Overall Quality

Measure Period End  
10/31/14

Bundle	Meas. Abbr.	Measure Name	Num.	Den.
BP Control	B1	BP Screen by 18	1,233	1,315
	B2	BP Screen by 13	1,589	1,721
	B3	Adult High BP Screen	75,184	88,743
	B4	HTN BP <140/90	17,452	24,860
Diabetes	D1	DM Retinopathy Screening	4,716	11,072
	D2	DM BP <140/90	8,146	11,170
	D3	DM HbA1c Test	11,338	12,289
	D4	DM LDL Test	10,519	12,289
	D5	DM Nephropathy Screening	7,504	10,494
	D6	DM HbA1c <8.0%	8,255	10,830
	D7	DM LDL <100mg/dl	5,818	10,756
	D8	DM HbA1c Performed and <9.0%	9,382	11,174
	D9	Daily Aspirin for DM and IVD	1,198	1,313
	D10	DM Tobacco Non-Use	9,768	11,170
	D11	DM Lipid Lowering Agent if LDL >100	2,205	3,488
	D12	DM HbA1c <7.0%	5,996	10,830
Immun.	I1	Influenza Immunization	35,934	72,552
	I2	Childhood Immunizations	1,565	1,758
	I3	Pneumonia Vaccination	17,902	24,241
Lipid Mgmt.	L2	CAD Drug Therapy for Lowering LDL	3,441	4,428
	L3	Cholesterol Screening for Cardiovascular Care	19,861	26,884
Misc.	M5	HF BB Therapy for LVSD	12	12
	M10	ACE ARB Therapy CAD, DM, LVSD	1,382	1,773
Preventative Screening	P1	Cervical Cancer Screen	12,880	22,385
	P2	Breast Cancer Screen	18,282	27,020
	P3	Adult BMI Screen and Follow-up	66,624	88,448
	P4	Depression Screen and Follow-Up	60,510	84,165
	P5	Tobacco Use and Cessation Counseling	83,326	88,869
	P7	Colorectal Cancer Screen	15,805	28,992
Pt. Safety	PS2	Screen for Future Fall Risk	19,880	26,735

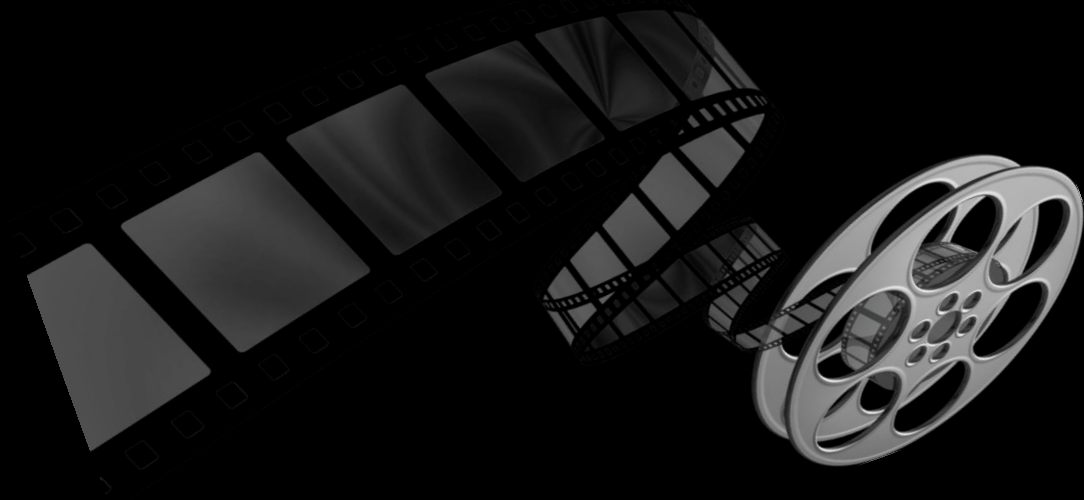


# Plank 7

## Trained in BP Goals and Metrics

- Care Transformation videos
- Orientation education

[MUPD Video](#)



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# Plank 8

## Specialties Intervene with Patients Not At Goal

- Barriers
  - Cultural barriers
  - Operational barriers
  - Accountability confusion



# Results

- Identification of additional Hypertensive Patients through proper screening by an additional 12 %
- Increased Accuracy of Blood Pressure Measurement through Clinical Training
- Community Outreach and Awareness

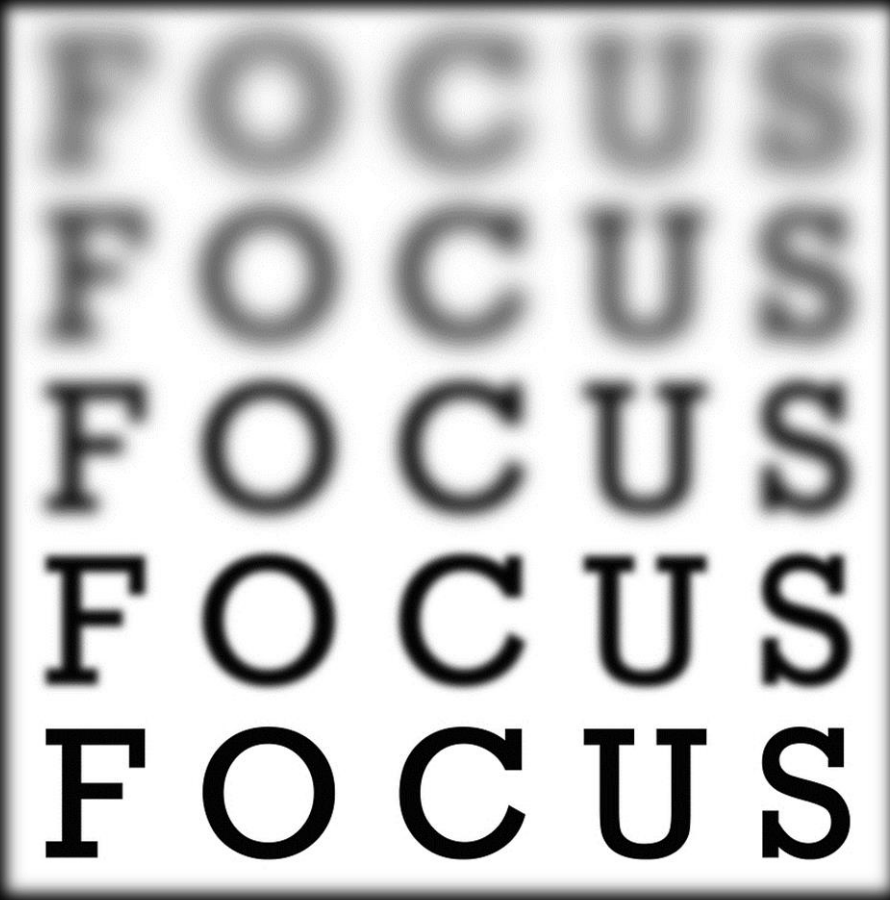




# Future Direction

- Continued Education of Providers, Medical Staff
- Additional Patient Education
- Blood Pressure Screening Events
- Home Blood Pressure Monitoring
- Free Blood Pressure checks in any of our clinics

# Areas of Focus



- Intervening on patients outside of the normal range instead of a wait and see approach
- Improved timely follow-up of newly diagnose patients or medicine change within 30 days
- Expand bandwidth of PCA group to actively outreach to hypertensive patients for proper management and follow-up

