



UNIVERSITY OF UTAH
HEALTH CARE

Hypertension Control

Implementation strategies for
Primary & Specialty Care settings

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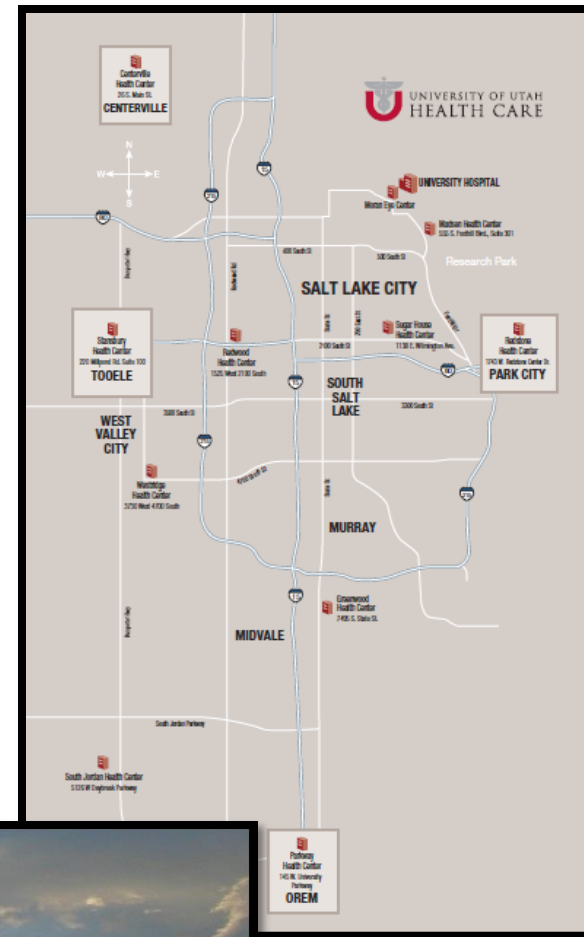
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Who we are

- Not-for-profit
- 592 inpatient beds
- 10,000 member team
- 2100 Health Care Providers
- Provide care for 10% of the US
 - Community Clinics
 - 130,000 unique patients
 - 370,000 visits annually
 - 600 staff
 - 95 providers
 - 10 free standing health centers in 5 counties



1 in 3 Americans have hypertension

\$47.5 billion in direct healthcare services, \$3.5 billion in lost productivity

50% of HTN patient not at goal nationally





**Measure Up
Pressure Down**

Are you aware of the AMGA's
Measure Up Pressure Down
Campaign?





**Measure Up
Pressure Down**

Is your organization
participating in the AMGA's
Measure Up Pressure Down
Campaign?



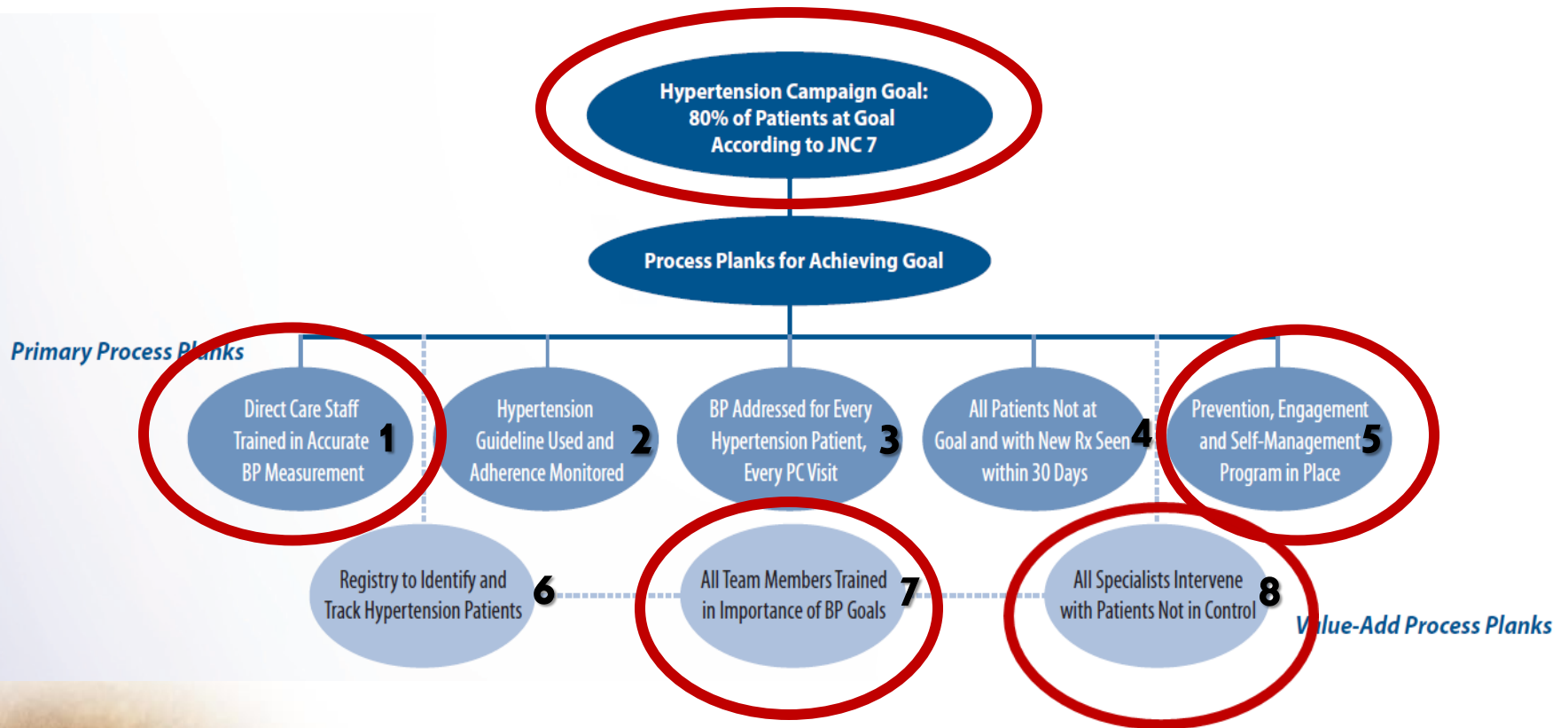
The chronic care challenge

Measure Up Pressure Down Campaign
(MUPD)

AMGA with support from AMGF
declared a challenge to have 80% of
patients in blood pressure control by
the year 2016.



Campaign Planks



Plank's 1 & 7

1: Direct Care staff trained in accurate BP measurement.

- Standardize blood pressure measurement by clinical staff

7: All team members trained in importance of BP goals and metrics

- Standard goal levels and interventions for patients not at goal



- Identified best practice and processes
- Developed training program with Clinical Staff Education and Ambulatory Clinical Leadership
 - Staff engagement campaign
 - Resource development for staff
 - Patient education materials



3 P's for Great BP's

Proper Patient Positioning



BP Variability

- Cuff too small= ↑ 10 to 40 mmHg
- Cuff too large= ↑ 10 to 40 mmHg
- Cuff over clothing= ↓ ↑ 10 to 40 mmHg
- Back unsupported= ↑ 5 to 15 mmHg
- Legs crossed= ↑ 5 to 8 mmHg
- Not rested= ↑ 10 to 20 mmHg
- Patient talking= ↑ 10 to 15 mmHg
- Full bladder= ↑ 10 to 15 mmHg
- Arm below heart level= ↑
- Arm above heart level= ↓





BP STARS

B- Bladder Empty

P- Planted, Both feet on the floor

S- Sitting or Standing

T- Talking, not talking you or them

A- Arm at level of the heart

R- Rested for at least 5 minutes

S- Starving (for 30 minutes)



Blood Pressure Targets

Primary Care

In general a BP of <139/89mmHg is acceptable

- SBP >140 or DBP >90 Notify provider
- SBP >180 or DBP >110 Notify Provider
- SBP <90 Notify Provider

Specialty Care

If >140-179 SBP or > 90-109 DBP .phrase in AVS

- Your blood pressure was ____ at today's visit. It is recommended that you make an appointment with you primary care provider for follow up. (**Order consult FP, IM or IM/Peds, queue will go to referral pool)

If SBP 180-209 or DBP 110-119

- Patient should be evaluated by their PCP if available or other available provider.

If SBP >210 or >120

- Provider should call PCP and discuss evaluation and treatment plan.

Pediatrics

Age	Pulse	Blood Pressure	Respiratory Rate
0-12 months	110-180	90/55	30-60
12-24 month	90-150	90/60	22-30
2-3 Years	90-150	95/60	22-30
4-5 years	65-135	99/65	20-24
6-8 Years	60-130	100/56	18-24
9 years	60-110	105/56	18-24
10-12 years	70-110	110/58	16-22
12-17 years	70-100	106-118/62-67	16-22



Vitals

? Close this section to view other vitals documented in this encounter.

Taken on: 10/7/2013 1446

BP:



SpO2:

Pain Information

Pulse:

Resp:

Temp:

Source:

Comment Entry

Comment:

LUA; bladder full; feet not flat

Accept

Cancel

OB/Gyn Status

LMP:

Having periods? ☒ Yes ☐ No

✓ Mark as Reviewed

Last Reviewed by Margaret Offret on 10/7/2013 at 1:56 PM



Providing you with the best care...

At University of Utah Health Care our goal is to provide you with the best care.

To ensure that we obtain the most accurate blood pressure during today's visit we may be asking you to:



Remove jackets or long sleeves.

Taking your blood pressure over clothing can increase or decrease the measurement by 10-40 points. Bare skin allows the blood pressure cuff to more accurately read the pressure.



Empty your bladder.

A full bladder can increase your blood pressure measurement by up to 10 points.



Refrain from talking during your blood pressure testing.

The most accurate measurement is obtained when your body is naturally at rest.



Rest comfortably with feet flat on the floor prior to your testing.

Allowing you to rest before taking your blood pressure decreases anxiety, stress or fear which can lead to higher blood pressure levels.



Avoid caffeine or a big meal prior to blood pressure testing when possible.

When you are digesting a big meal or have caffeine it increases your body's metabolism and can increase your blood pressure and make the reading less accurate.

Staff engagement campaign



We are committed to provide the best care possible for our patients!

We have pledged that as participants in the Measure Up Pressure Down Campaign that we will:

Always use the "3P's for Great BP's"

Be committed to obtaining accurate blood pressure measurements to ensure best treatment for our patients

Become BP STARS for ourselves and our patients!

BP Measurement Observation Checklist

Please use the listed criteria for peer observation of BP monitoring. No more than 5 observations per person per day. Turn in to your nurse manager/supervisor for tracking.

- ☐ Correct cuff size used
- ☐ Bladder emptied
- ☐ Both feet flat on the floor
- ☐ Sitting supported in a chair or exam table
- ☐ Not talking
- ☐ Arm at the level of the heart
- ☐ Rested for at least 5 minutes
- ☐ Starving (No food or caffeine for 30 minutes prior)
- ☐ Palpate the brachial artery
- ☐ Place cuff on arm, unobstructed (not over clothes)
- ☐ Document BP w/ patient position & arm used

Staff member observed: _____

Observer signature: _____

Date: _____





Thank you so very much for your dedication and work in implementing the blood pressure measurement standards as part of our commitment to providing quality care for our patients.

As you know the Community Clinics have joined the AMGA's national Measure Up Pressure Down campaign as a way to decrease high blood pressure in patients across the nation.

Your personal devotion to this effort has made an impact on the lives of our patients and has helped improve their outcomes. This is the reason we care for patients, to make them better with the work we do every day.

You are a true professional and it is a privilege to know that our patients are so well cared for.

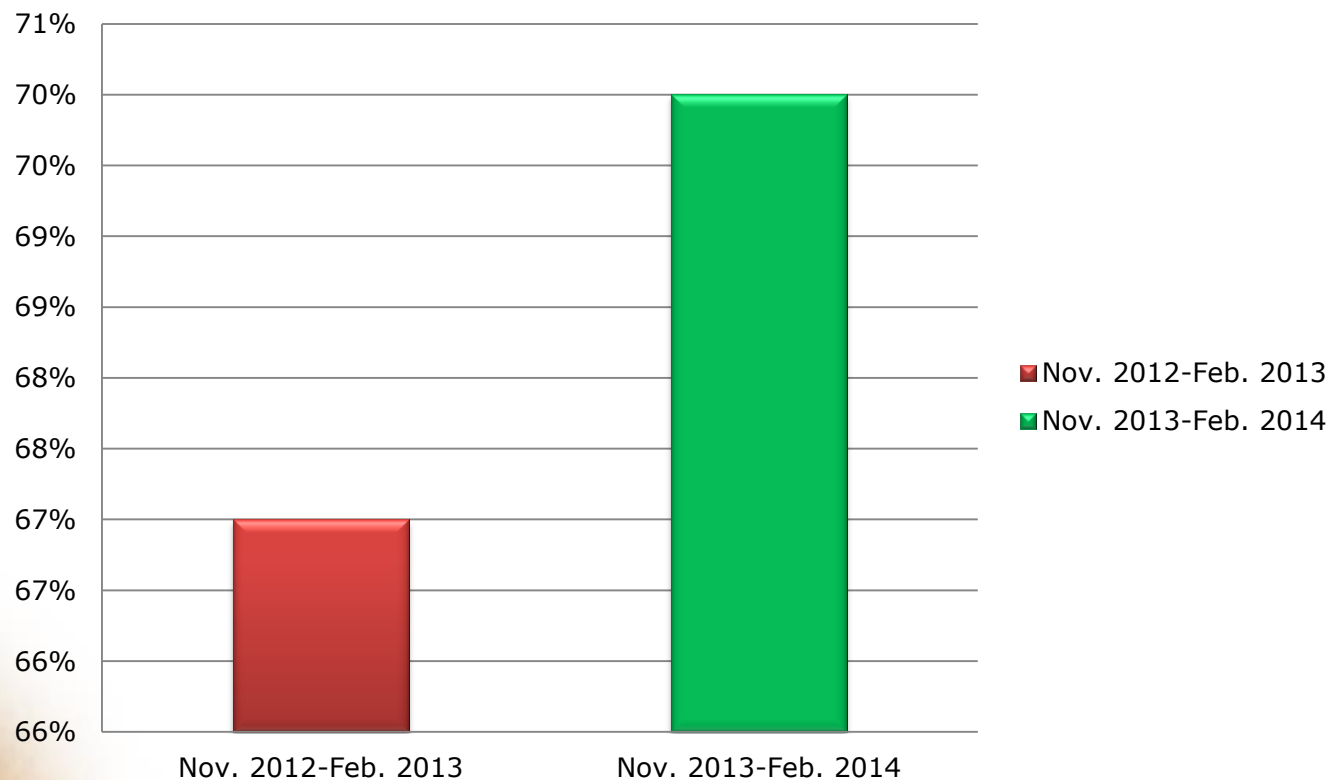
Please accept this token as a reminder that you are not only an asset to our clinic but a true star as well!

Susan Terry, MD
Executive Medical Director

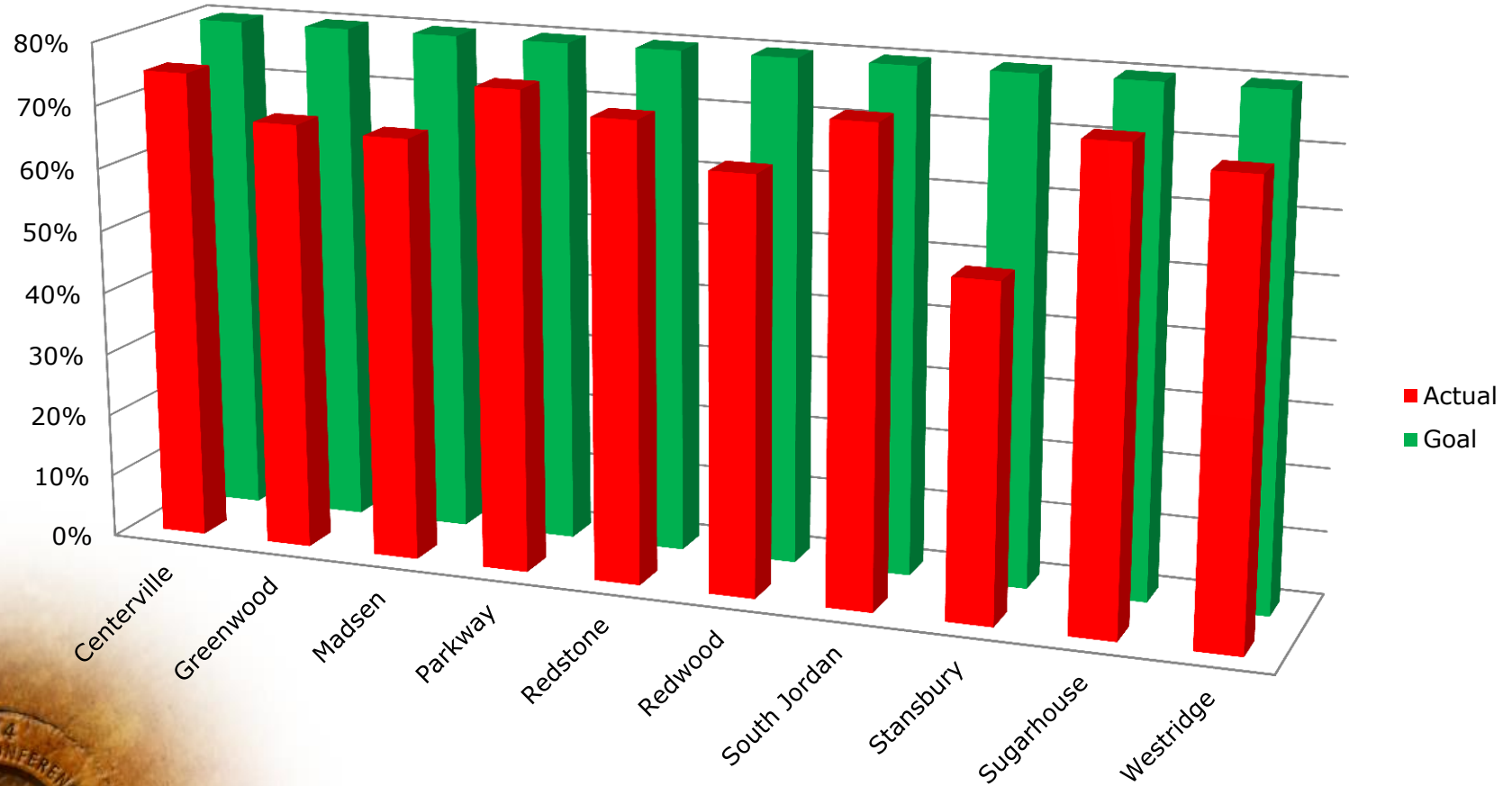


Did it work?

Pre & post training



Center Comparison



Plank 5

Prevention, engagement and self-management program in place

- Living well with chronic conditions
- Community health fairs and events





Blood volume display





Measure Up
Pressure Down

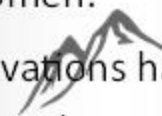
How much blood do you have?

Body Weight (lb)	Blood Volume (mL)*
0-10	200
11-20	300
21-30	500
31-40	1000
41-51	1640
52-63	2140
64-74	2600
75-85	3080
86-97	3550
98-109	4030
>110	4500

*Averages



Pregnant women have **50%** more blood than non-pregnant women.



People at higher elevations have **20%** more blood than people at sea level.



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Heart to Heart



You

Weight: 11 ounces
Size: your fist kids
2 fists for adults



Horse

Weight: 5 pounds
Size: small football



Cow

Weight: 5 pounds
Size: Football



Pig

Weight: 11 ounces
Size: your fist



Dog

Weight: 8 ounces
Size: Small plum



Cat

Weight: 3 grams
Size: Large Walnut



Chicken

Weight: 6 grams
Size: Strawberry



Deer

Weight: 3 pounds
Size: Cantaloupe



Blue Whale

Weight: 1300 pounds
Size: A small Car

*Not even close to actual size



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Heart Facts



There are more than 60,000 miles of blood vessels in an adult body!



Your heart is in the center of your chest tipped a little to the left!



It takes about 10 seconds for blood to go from your heart to your big toe and back!



Capillaries are so small that it takes 10 of them to equal the thickness of one human hair!



The aorta is the same size as a garden hose!



The heart pumps about 1 million barrels of blood during an average lifetime— that's enough to fill more than 3 supertankers!



Your body has about 5.6 liters of blood. This 5.6 liters circulate through the body 3 times every minute!




In one day, your blood travels 12,000 miles— that's four times the distance across the US coast to coast!



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**Measure Up
Pressure Down**





Blood Pressure Goals*


Blood Pressure Category	Systolic (mmHg)		Diastolic (mmHg)
Normal	< 120	&	< 80
Prehypertension	120-139	or	80-89
High			
Stage 1	140-159	or	90-99
Stage 2	> 160	or	> 100

*American Heart Association

Diabetic? BP Goal is < 130/80 mmHg.

How to control your blood pressure:

- Reduce stress. 
- Maintain a healthy weight. 
- Do physical activity for 30 minutes a day.
- Eat well. 
- Choose foods that are low in salt. 
- Reduce alcohol intake.
- Take blood pressure medicine as prescribed to you.

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Plank 8

All specialty departments routinely take blood pressures on all patients and refer patients who are not at goal to PCP.



If $>140-179$ SBP or $> 90-109$ DBP
(.phrase in AVS)

"Your blood pressure was _____ at today's visit. It is recommended that you make an appointment with you primary care provider for follow up."

(***Order consult FP, queue will go to referral coordinators)

If SBP 180-209 or DBP 110-119

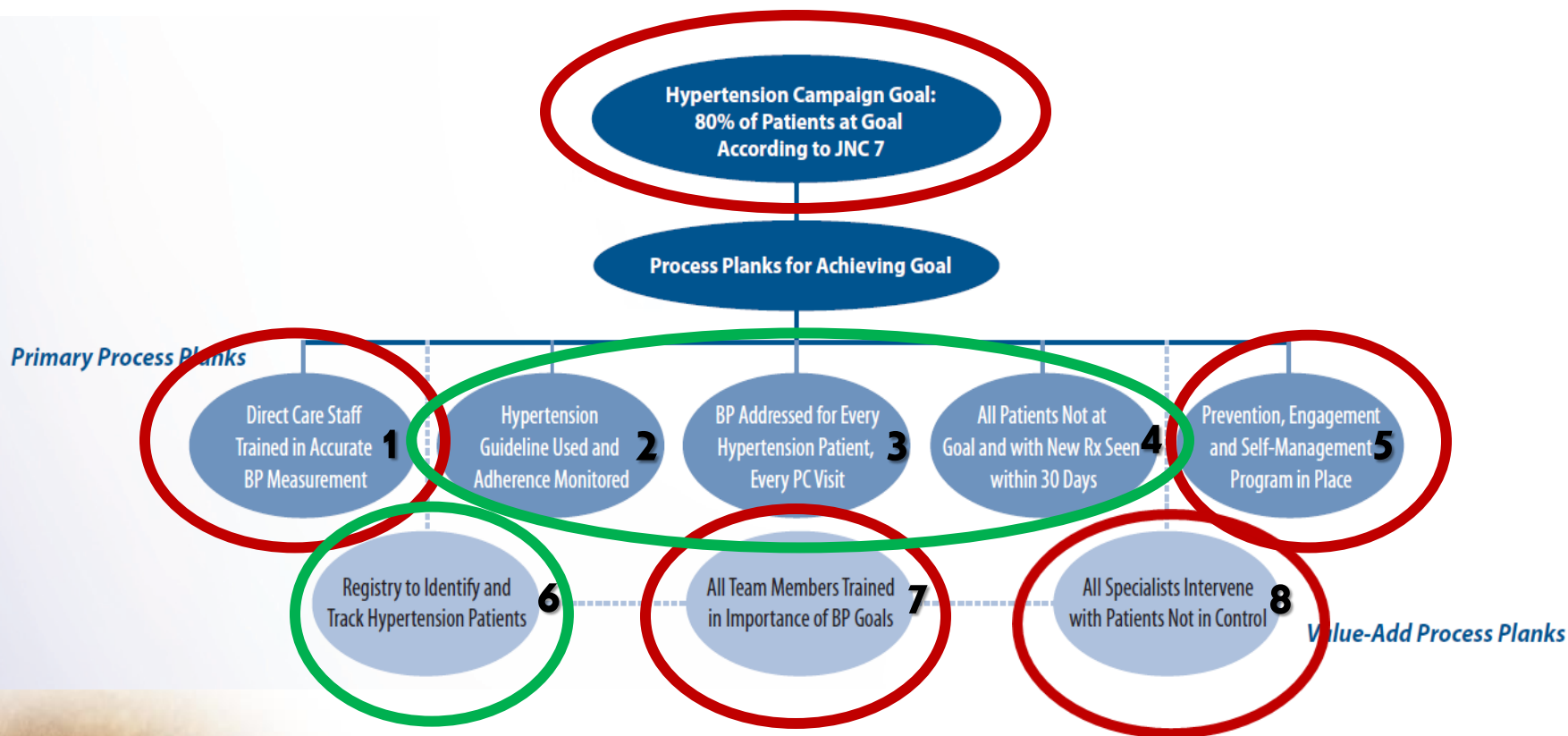
Patient will be evaluated by their PCP if available or other available provider.

If SBP >210 or >120

Provider will call PCP and discuss evaluation and treatment plan.



Next Steps



Questions?



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Contact Information

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References

Measure up pressure down Provider toolkit to improve hypertension control. American medical group foundation.

JNC 7 report. Prevention, detection and evaluation of blood pressure. US departments of health and human services. December 2003.

