



# Group Healthcare to Control Hypertension

Heather A. Shlosser, DNPc, MSN, FNP-BC, PMHNP

University of Virginia Graduate School of Nursing, Charlottesville, VA



## BACKGROUND

Hypertension treatment in traditional fee-for-service individual office visits is not reducing risks for cardiovascular and renal disease. More than 65 million adult Americans have hypertension. Hypertension continues to be the foremost reason for visits to the primary care provider in the United States. Estimates indicate that only one fourth of patients with diagnosed hypertension have sufficiently controlled blood pressures (Hyman & Pavlik, 2001). Hyman and Pavlik revealed that those who received more intensive intervention fared much better. Time constraints in primary care are a contributing barrier to effective chronic disease management resulting in less than desirable outcomes (Otsby et al., 2005).

Studies have concluded that medical therapy for the patients with uncontrolled blood pressure was not aggressive enough & have emphasized that control of hypertension would be improved with changes in delivery of care away from the traditional fee-for-service in-office individual visits (Berlowitz et al., 1998).

Mohammadi, Abedi, Gofranipour, & Jalali (2002) identified non-compliance, lack of knowledge, lack of effective relationship and partnership between patients and providers as areas associated with inadequate blood pressure control. Effective intervention and treatment of hypertension is required to avoid potential adverse outcomes such as myocardial infarction, stroke, heart failure or renal failure (Ong, Cheung, Man, Lau, & Lam, 2007).

## PURPOSE

This comparison study was conducted to examine an alternative model of patient care delivery, the group healthcare visit for enhanced quality of care outcomes and increased self-efficacy.

- Hypotheses: Participation in hypertension group visits will demonstrate (1) decreased blood pressure readings and (2) increased self efficacy scores compared to the those patients who receive treatment as usual.

## SETTING

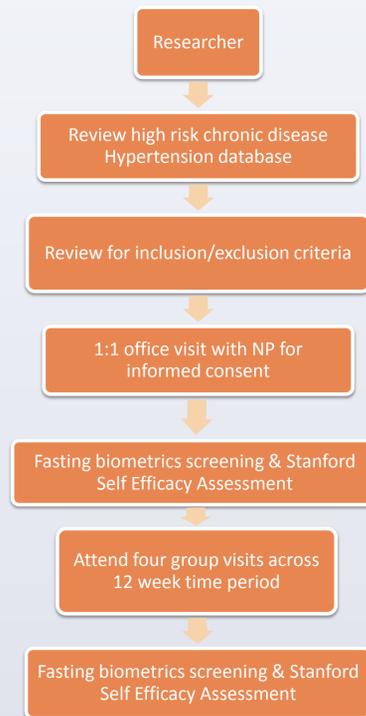
- Worksite primary care clinic in Keene, New Hampshire.
- Approximately 3000 employees and their family members are eligible to receive services through the clinic.

## SAMPLE CHARACTERISTICS

|               | Experimental<br>n = 15 | Control (TAU)<br>n = 15 |
|---------------|------------------------|-------------------------|
| Age, mean ±SD | 50.3 ± 7               | 42.1 ± 16.5             |
| Gender        |                        |                         |
| Female        | 10 (66.67)             | 7 (46.67)               |
| Male          | 5 (33.33)              | 8 (53.33)               |

## MATERIALS & METHODS

### Hypertension Group Visit Study Protocol

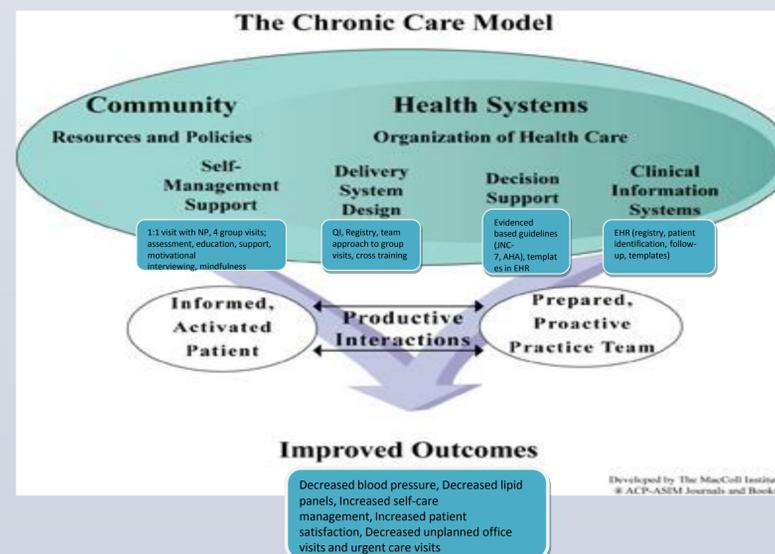


- All study participants, experimental (n = 15) & TAU (n=15) had fasting blood sugar, lipids, weight, BP, waist circumference, BMI & body fat percentage completed at the start of the study and at the conclusion of the study.

- All Study participants completed the Stanford Self Efficacy Assessment at the start of the study and at the conclusion of the study.



## THEORETICAL FRAMEWORK



The Chronic Care Model. (n.d). *Improving chronic illness care*. Retrieved from [http://www.improvingchroniccare.org/index.php?p=Model\\_Elements&s=18](http://www.improvingchroniccare.org/index.php?p=Model_Elements&s=18)  
Figure above has been altered to include an overlay of group visit clinical staff roles and supports

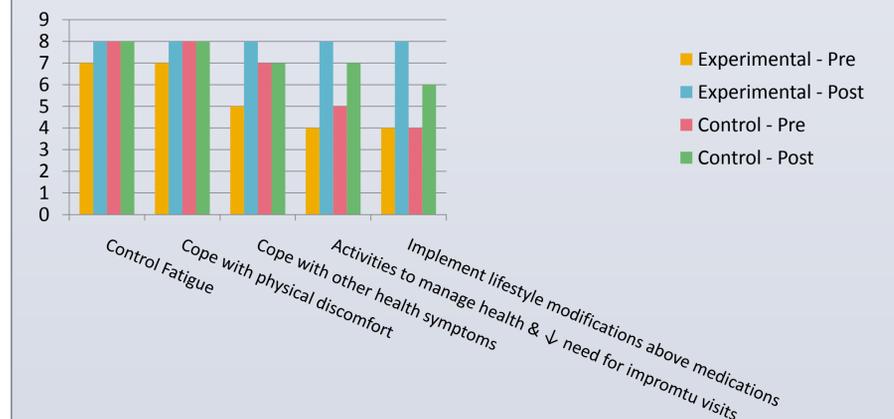
## RESULTS

- Experimental group participants demonstrated lower blood pressure readings and increased self efficacy by the conclusion of the group visit program.
- Experimental group participants demonstrated greater improvements in both blood pressure control and self efficacy scores when compared to the TAU group.
- TAU group had an average of 3.5 visits across a 12 week period with an average of 25 minutes per visit.
- Experimental group participants each attended 4 group visit sessions across 12 week period with an average of 1.25 hrs per visit.

### Comparison of Study Variables

|                     | Experimental<br>(n = 15) |        | Control<br>(n = 15) |        |
|---------------------|--------------------------|--------|---------------------|--------|
|                     | Pre                      | Post   | Pre                 | Post   |
| Mean Blood Pressure | 142/84                   | 118/68 | 138/83              | 140/86 |

### Self Efficacy Outcomes



## REFERENCES

- Berlowitz, D.R., Ash, A.S., Hickey, E.C., Friedman, R.H., Glickman, M., Kader, B., & Moskowitz, M.A. (1998). Inadequate management of blood pressure in a hypertensive population. *The New England Journal of Medicine*, 339(27), 1957-1963.
- Hyman, D. J., & Pavlik, V. N. (2001) Characteristics of patients with uncontrolled hypertension in the united states. *JAMA*, 345(7), 479 - 486.
- Mohammadi, E., Abedi, H., Gofranipour, F., & Jalali, F. (2002). Partnership caring: a theory of high blood pressure control in Iranian hypertensives. *International Journal of Nursing Practice*, 8(6), 324. Retrieved from Health Source: Nursing/Academic Edition database.
- Ong, K. L., Cheung, B. M., Man, Y. B., Lau, C. P., & Lam, K. S. (2007). Prevalence, awareness, treatment, and control of hypertension among united states adults 1999 - 2004. *Hypertension*, 49, 69 - 75.
- Ostby, T., Yarnall, K.S., Krause, K.M., Pollak, K.I., Gradison, M., & Michener, J.L. (2005). Is there time for management of patients with chronic disease in primary care? *Annals of Family Medicine*, 3, 209-214.