Title of Program: Alta Bates 5-Step Hypertension Management Program

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Description of Case

The purpose of the Northern California Kaiser Permenante's 5-Step Hypertension Management Program was to decrease the blood pressure (BP) rates of patients with hypertension (HTN) by simplifying the use of BP medication, providing no-cost follow-up visits, and providing medical staff with the best practice educational material. This model will be implemented among Alta Bates' 10 provider primary care practice groups to see if the program would also be effective in lowering BP among their patient population.

Goal 1: There will be lower rates of hypertension among Alta Bates' primary care patients.

Objective 1: After 3 years of implementation of the program, there will be a 50% reduction in the number of patients with hypertension

Goal 2: There will be an increase in the number of patients attending BP follow-up visits after implementation of flexible, no-cost follow-up visits.

<u>Objective 2</u>: After one year of implementation, there will be a 15% increase in the number of hypertension patients booking and attending BP follow-up visits.

Goal 3: Specialized medical personnel will show an increase in knowledge of best practices for monitoring BP and other vital signs among participating patients after the completion of training sessions.

<u>Objective 3</u>: After completion of four bi-weekly training sessions, there will be a 50% increase in specialized medical personnel's knowledge of assessing and evaluating the warning signs of BP and other vital signs.

Goal 4: Patients will show an increased knowledge of hypertension and BP management.

Objective 4: After one year of implementation, 30% of patients within Alta Bates' participating practices will experience lower rates of hypertension than they did before entering the program

Goal 5: Participating physicians will be more informed about evidence-based guidelines regarding the prescription of BP medication

<u>Objective 5</u>: After the completion of four informational sessions, at least 5 physicians will show an increase in knowledge about evidence-based guidelines regarding prescribing BP medication.

Purpose of Evaluation

The purpose of this evaluation is to track the reduction of Alta Bates patients' high blood pressure levels after the implementation of the hypertension management program. The findings of this program after implementation will be used by Alta Bates' medical staff and administration to better understand their patient population and allow them to better coordinate their care when it comes to hypertension management.

Program: Alta bates' 5-Step Hypertension Management Program Logic Model

<u>Situation</u>: The purpose of the 5-Step Hypertension Management Program is to decrease the blood pressure (BP) rates among primary care patients with hypertension (HTN) by simplifying BP medication, providing no-cost follow-up visits, and providing medical staff with best practice educational material.

Inputs	4		puts		Outcomes Impact		
Researchers Alta Bates Primary care patients with elevated BP Primary care physicians (PCPs) Effective BP management guidelines/curriculum Medical Staff (i.e. MAs) Funding Health Educators/Facilitators Partnership with pharmaceutical company Biomedical equipment	education medical practices monitori easier-to from a p compani on the monitori options in program patients program pr	BP reduction on sessions for staff on best is for managing and ing HTN. Obtaining object of the providing flexible cost follow-up visit for patients Create pamphlets immation on BP in to distribute to Promoting BP in through email iters and during	Participation Patients with high BP Physicians Alta Bates' primary care practices Medical staff		• Medical staff increasing their knowledge in BP reduction ways to prevent hypertension • Establish relationships with medical staff & patients providing better practices that prevent & reduce BP • 15% increase in patients booking follow-up appointments	Medium Patients develop better habits in reducing their high BP 25% reduction in the number of HTN patients 50% of patients using simplified BP medication Increased ability to enroll patients into the program Increased specialized personnel for no-cost follow-up appointments	● 50% reduction in the number of HTN patients ● 75-85% of patients using simplified BP medication ● Built trust within the program between the program & patients, increasing the enrollment of participants

Assumptions

- Continuous funding to support the program
- Patients will want to lower and manage their BP
- Physicians would be more educated on BP and best practices for managing patients' BP

External Factors

- Individual health behavior/attitudes and trust built within the health care system prevent patients (especially people of color) from enrolling in programs due to negative past experiences (i.e. racial bias/discrimination).
- transportation difficulties (i.e. they may mainly take public transit or walk) to follow-up appointments and inability to take time off work to come to these appointments
- Patients' individual health literacy levels that prevent them from fully understanding the severity and importance of maintaining BP
- Patients' cultural and/or religious beliefs can prevent them from adhering to maintenance plans or taking their medication (i.e Jehovah's Witnesses)

Evaluation Goals and Objectives / Study Design

The goal of this evaluation is to determine how implementation of this program is impacting patients with high hypertension (HTN) rates. Evaluations questions driving the evaluation include those that investigate any barriers to participating in the program, any areas for improvement, and areas of success in reducing patients' blood pressure (BP).

We will be using a combination of qualitative and quantitative data collection methods and using the one-group evaluation design where we will be comparing the program participants' against themselves to assess any changes that occurred in their BP management habits, knowledge, and HTN diagnosis.

Table of Objectives and Indicators, Methods & Data Collection Instruments

Evaluation Questions (please indicate whether it is process or outcome)	Indicators	Methods	What instruments/data sources will be used to measure your key indicators? Provide a brief description
OUTCOME: With the implementation of the program, have we seen a decrease in patients with HTN?	Participation rateBP readings	QUANTITATIVE: Look at the records of Individual Patient BP Logs (collected from visits)	- Medical logs - Visit Summaries
PROCESS: Were there any barriers that prevented patients from continuing the 5-step Hypertension Management Program?	 Dropout rates Survey responses from patients regarding their experience with the program 	QUANTITATIVE: Look at BP Program Registry to assess drop-in participants QUALITATIVE: Patient reports on reasons they dropped out of the program	-Patient interviews -Surveys
PROCESS: How effectively were promotional strategies for the BP program implemented to encourage patient engagement?	 Number of pamphlets distributed Increase the number of patients aware of BP Program Increase in patients enrolled in BP Program 	QUANTITATIVE: Track pamphlet distribution through keeping a count QUALITATIVE: Conduct surveys on patient awareness of program QUANTITATIVE: BP Program's Patient Enrollment Registry	- Pamphlet distribution logs - Patient surveys - BP Program Registry
PROCESS: In what ways did the participants find this 5-step program beneficial?	 Satisfaction rates Feedback for improvements from patients 	QUALITATIVE: Look at the amount of positive feedback given by patients	-Surveys given at the end of the patients participation in the program - Interviews three months into patients'

	QUALITATIVE: Look at interview transcripts and see if there was any constructive feedback on patients' experiences during program	participation in program
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Data Analysis Table

(Briefly tell how your quantitative and qualitative data will be analyzed)

What instruments/data sources will be used			
to measure your key indicators? Provide a			
brief description	Result type (Quantitative or Qualitative?)	How data will be analyzed	How findings will be shared
		Can look at the records of Individual Patient	
Medical Logs will be used to record measured		BP Logs (collected from visits) to understand if	An analytical report will be created to show
BP by medical assistants	Quantitative	there is a change in HTN	our patient BP trends.
		Can look at transcripts/listen to recordings of	
Patient Interviews will be used to gain		the interviews to understand if there were any	Write a report which is qualitatively analyzing
perspectives on the 5-step hypertension		barriers or challenges in the 5-step	patient interview responses to uncover
management program by the interviewers	Qualitative	hypertension management program	common themes among those interviewed
		Can look at the distribution logs of the	Write an analytical report which is
		pamphlets to understand if information	quantitatively analyzing the effectiveness of
Pamphlet distribution logs will be used to		regarding promotional strategies of the BP	the pamphlet distribution on patient
record issuance of pamphlets among patients	Quantitative	program led to increased patient engagement	engagement

Sampling

Purposive sampling will be used to select participants for this program as participants would need to meet the sole criteria of having hypertension as the program focuses on the successfulness of managing their hypertension diagnosis via the 5-step hypertension management program. The participants will be conveniently selected from each of the 10 provider primary care practice groups by Alta Bates. Our goal is to have a sample size of 4 people from each primary care practice group, resulting in a total population size for the study of 40 participants, with the flexibility to adjust based on data saturation. Participation in the program is voluntary and participants are free to withdraw from the program at any time without repercussions.

Anticipated Implementation Challenges and Possible Solutions

In the anticipated implementation of our program, several challenges may arise, and we have devised potential solutions to address them. One primary challenge involves ensuring enough active participants to generate meaningful results and data. To tackle this, we propose the implementation of incentives aimed at attracting new participants to the program. Another challenge we anticipate is sustaining participants' engagement throughout the program. To counter this, we suggest offering a closing incentive for individuals who successfully complete the 5-step program, thereby encouraging continued involvement. Adherence to medication poses another hurdle, and our solution involves initiating patient education initiatives to bolster awareness and understanding of the importance of consistent medication adherence. Furthermore, maintaining participants' commitment to blood pressure management practices beyond the program's duration presents a challenge. To address this, we recommend establishing ongoing communication between physicians and patients through bi-monthly in-person or virtual appointments. The mode of contact can be tailored to patient preference, including mail notices, portal communication, text messages, or phone calls. Lastly, we acknowledge the potential workload strain on medical staff. To alleviate this burden, we propose integrating technological solutions, such as telemedicine and automated reminders, to streamline patient follow-ups. These measures aim to enhance the efficiency of the program while reducing the workload on medical personnel.