

Chronic Disease Management

St Thomas Community Health Center

Nnenna Uzodi

June 20, 2019

LESSONS

PROGRAMS

THE
CLINIC

WHY
CDM?

INTRO

DONALD T. ERWIN BUILDING

1936

ST THOMAS
COMMUNITY
HEALTH CENTER

INTRODUCTION

Nnenna Uzodi, MBBS MPH

**St Thomas Community Health Center
Clinical Epidemiologist
Quality Improvement & Population Management
Regulatory Reporting**

AGENDA

- *Why Chronic Disease Management?*
- *Health Coaches: Reaching patients 24/7*
- *The Clinic*
- *Five (5) Chronic Disease Management programs*
- *Spotlight: The Hypertension & CCM Programs*
- *Problems & Solutions*
- *Key takeaways*

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Why Chronic Disease Management?

Traditional Care Model:

- Focus is on Acute Care
- Cures disease inside the clinic
- Brief visit with no planning
- Passive patient
- Missed Psychosocial needs
- No informative tools
- Low quality care and outcomes

Chronic Disease Model:

- Focus is on Chronic Care
- Addresses disease both inside and outside the clinic
- Preplanned clinician visits
- Well-informed patient
- Psychosocial needs addressed
- Supportive information systems
- High quality care & outcomes

Wagner, E., Austin, B., & Von Korff, M. (1996). Organizing Care for Patients with Chronic Illness. *The Milbank Quarterly*, 74(4), 511-544. doi:10.2307/3350391

Moving from Model 1 to Model 2



Leadership

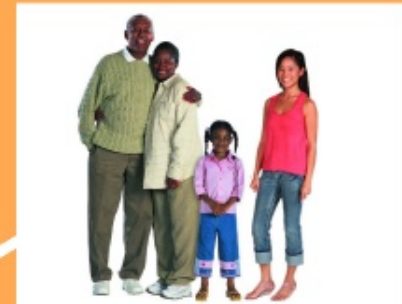


Clinical Team

Information Systems



Bodenheimer T, Wagner EH, Grumbach K. Improving Primary Care for Patients With Chronic Illness. JAMA.2002;288(14):1775-1779. doi:10.1001/jama.288.14.1775



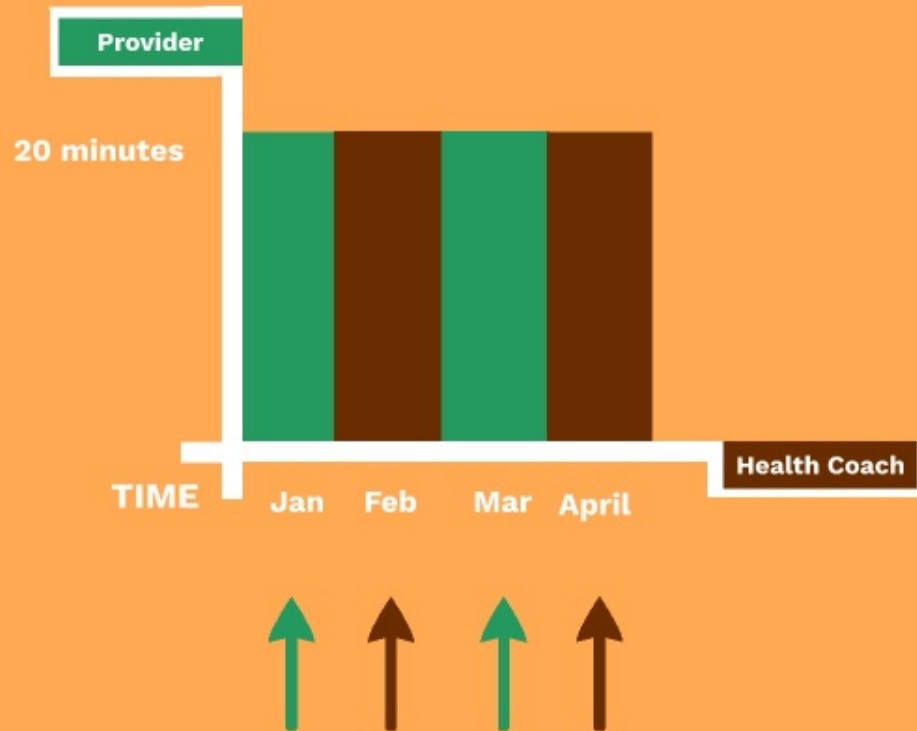
Patients, Family & Community



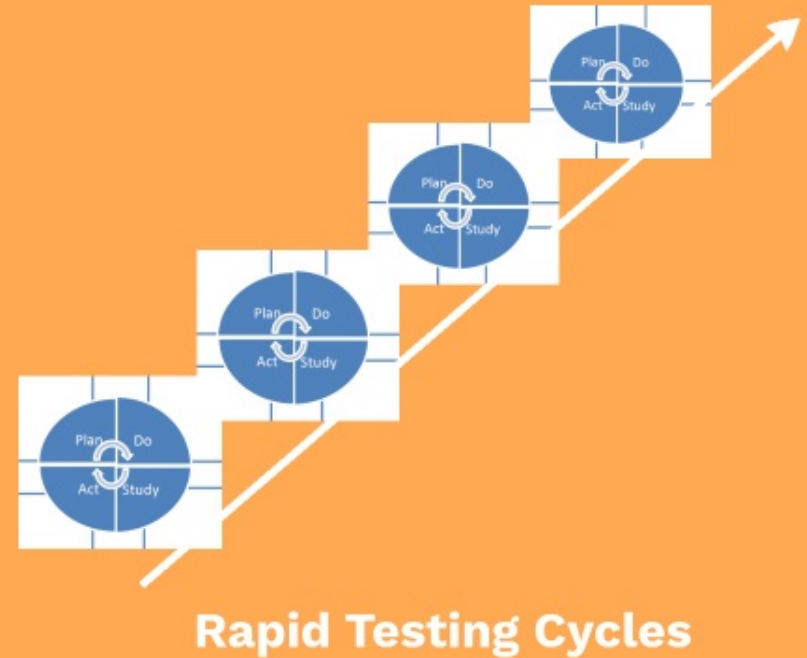
Proactive team

Decision Support

Element 1: Burden Sharing



Element 2: use PDSA

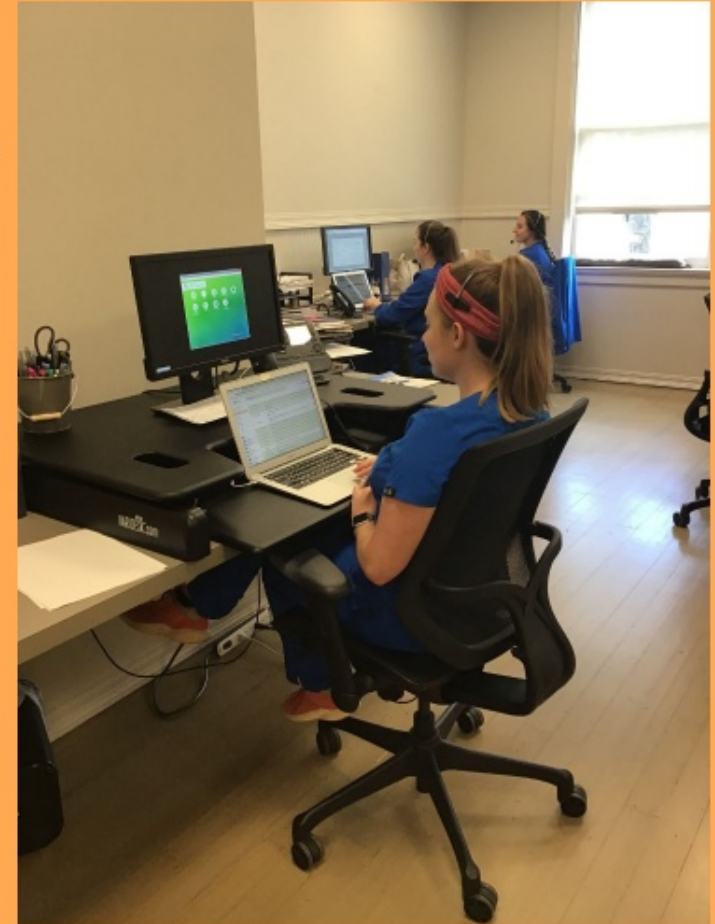


The Health Coach

- Specialized
- Communicates with patients outside the clinic via telephone

Duties include:

- Motivational Interviewing
- Self-management goal setting
- Vital signs telemonitoring e.g. weight
- Health Education
- Pre-visit planning
- Care coordination
- Medication reconciliation
- Patient barriers & needs assessment



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About St Thomas Community Health Center

PCMH

Founded 30 years ago.

7 locations
30 providers

Offers:

Adult Primary Care
Pediatrics Primary Care

Specialty services in:

Infectious Diseases
Cardiology
Adult & Child Psychiatry
Women's Health
Optometry
Rheumatology
Gastroenterology

Patient Demographics in 2018:

25,000 patients
85% Adults
63% Female

72% African-Americans, 20% Caucasians, rest-Asians/
Multiracial/Unreported

68% Government-funded insurance
17% Uninsured

THE COMMONEST CHRONIC DISEASES in St Thomas

In 2018:

At least 1 in 3 St Thomas patients had a Chronic Disease

1 in 3 patients seen was Overweight or Obese

1 in 4 patients seen has Hypertension

1 in 10 patients seen has Diabetes Mellitus

6% had a Mood Disorder

***Not stratified by age**

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FIVE PROGRAMS USING THE CHRONIC CARE MODEL

PILOT PROGRAM CHARACTERISTICS	HYPERTENSION (Home based)	HYPERTENSION (Clinic based)	DIABETES MELLITUS	HEART FAILURE	CHRONIC CARE MANAGEMENT
COUNT	536	27	180	123	730
SELF-MEASUREMENT	✓	✓	X	✓	✓
TELEMONITORING	✓	X	X	✓	✓
CARE COORDINATION	✓	✓	✓	✓	✓
HEALTH EDUCATION	✓	✓	✓	✓	✓
SELF-MANAGEMENT GOAL SETTING	✓	✓	✓	✓	✓
STANDING ORDERS: LABS/EXAMS/PROCEDURES	✓	✓	✓	X	✓
VIRTUAL MEDICATION TITRATION	✓	X	X	✓	X
GROUP VISITS	X	X	✓	X	X
CASE MANAGEMENT	✓	✓	✓	✓	✓
CLINICAL MEDICAL EDUCATION	X	✓	✓	✓	✓
PRE-VISIT PLANNING	✓	✓	✓	✓	✓
OUTCOMES ASSESSED:	BP Control	BP Control	A1C < 9%	QoL	BP Control
	Self-engagement	Self-engagement	A1C < 8%	Reverse Remodeling rate	Self-engagement
	Health Capability	Health Capability		Hospitalization rate	Health Capability
				Mortality	A1C < 9%
				Self-engagement	ER visits
				Health Capability	Hospitalization rate

THE HYPERTENSION PROGRAM: home based telemonitoring Jan 2017-June 2018

Eligibility: BP \geq 140/90 mmHg

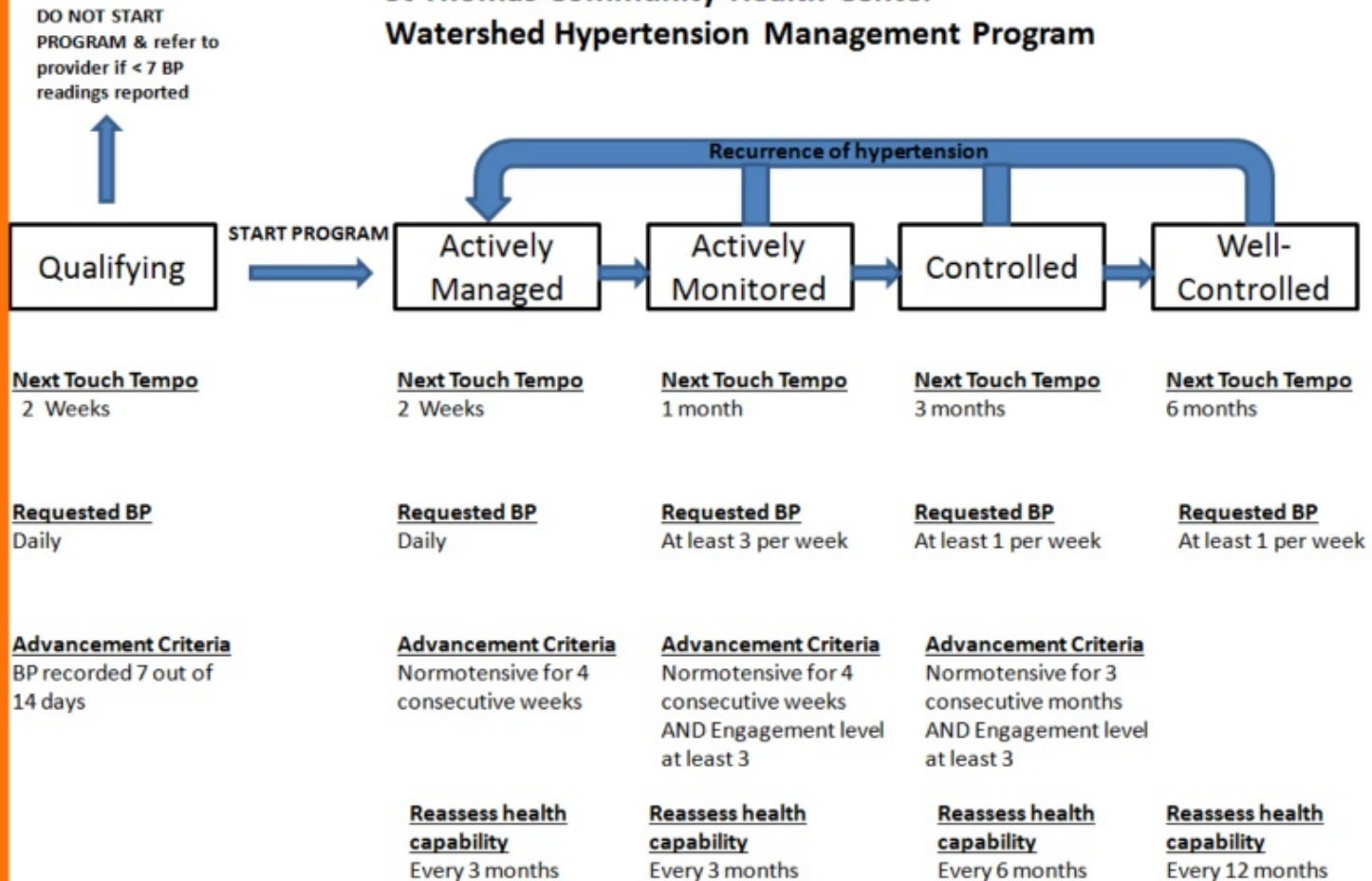
Exclude: ESRD, Systolic heart failure

Question: Can we control a patient's Blood Pressure outside the usual care visits?

Highlights:

- Program duration for at least 90 days
- Patients consent to opt in
- Provided a free automatic BP device
- Patient can text or call-in BP reading
- 24-hour-a-day access to care team
- Medication titration performed using an antihypertensive medication algorithm
- Healthy lifestyle habits encouraged
- Use of Watershed™ to track BP trend

St Thomas Community Health Center Watershed Hypertension Management Program



RESULT:

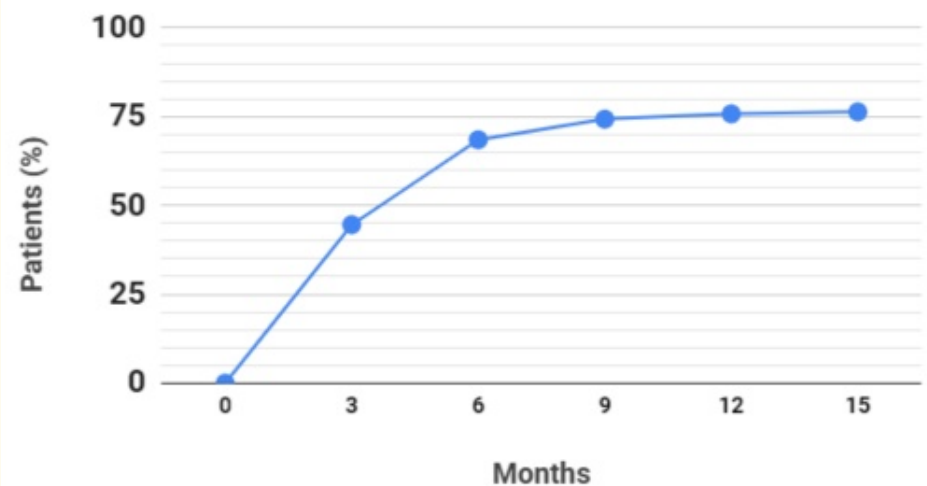
343 patients

Average number of sessions received: 7.5

76% Control Rate (2017 data: UDS National 63%, St Thomas 55%)



% BP Control over Months



A sample case

Health Capability (2 of 10) :   2.0  100%    \$   

Elderly male smoker with Diabetes Mellitus (A1C 13.2), Hepatitis C >5 million VL, CAD, IVDU, a lower extremity amputation, homelessness with no social support. Needed a refrigerator for insulin storage.

Needs:

Housing (Unmet)
Transportation (Unmet)
Financial (Unmet)
Medical (Unmet)
Literacy (Unmet)

Interventions offered:

Mediator with estranged family

Care Coordination: Inpatient visits and outpatient visits- Wound care, Primary Care, Specialty care

Social: Transportation and Housing

Education on healthy lifestyle habits

1 year later: Undetected Hepatitis C viral load, A1C 7.8, son now part of patient's care and patient was off the streets.

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PROBLEMS	SOLUTIONS
Dropout	Started a second chance program tailored to dropouts
Reliance on phone service availability	Government-issued cell-phones, Worked with patient's schedule
The burden of reporting self-measurements	Intermittent phone calls to collect log, Wifi-enabled devices
Inaccurate BP measurements	Accurate BP check training

Key takeaways

- **Workforce empathy and constant affirmation are essential**
- **Pace health education for patients**
- **Consider the small details: patient's availability, patient's literacy level, can patient send an SMS?**
- **Always do 'with' the patient and not 'for' the patient**
- **Studying both quantitative and qualitative program data are useful**

Questions?



Thank you!

CONTACT INFORMATION:
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