



**eHEALTH INITIATIVE**

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**Centering on the Patient:  
How Electronic Health Records  
Enable Care Coordination**

**April 26, 2011**

- Research supported by:



- Conducted under auspices of eHealth Initiative (eHI) and Health and Technology Vector (H & TV)



# Today's Agenda

- Welcome and Introductions (1:00 – 1:05)
  - Jennifer Covich, eHealth Initiative
- Introduction and Context for the project (1:05 – 1:15)
  - Tehseen Salimi, MD MHA, sanofi-aventis
- Walk Through the Project (1:15- 1:30)
  - Victor Villagra, MD, Health and Technology Vector
- Lessons Learned (1:30- 2:00)
  - Paul Kaye, MD, Taconic IPA, Medical Director
  - Deb Ward, RN, Community Health Center, Care Coordinator
- Discussion and Questions (2:00 – 2:30)



# Introduction & Context for Project

Tehseen Salimi, MD MHA  
sanofi-aventis



# Project Context

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- The project was designed in the spirit of Patient-Centricity.
- The project focused on narrowing the gaps between the theory and practice of care coordination for diabetic patients
- To find integrated solutions that improve care coordination and ultimately quality of health care for diabetics
- Care Coordination & E health decision support tools can improve patient access the link between primary care and specialists.



# Voices from the Patients

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- *“The term coordination says it all. I felt like it all worked together.”*
- *“It was great when we had to go to the hospital, because they are always asking for the medications, and we had the list already.”*
- *“The goals she set were reasonable, appropriate, realistic, and designed around my lifestyle.”*



# National Context

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- Health care costs drive state and national budget deficits.
- How to control costs of health care?
- How to improve patient access to care?
- How to improve the care management and quality of healthcare?



- Examine the gap between the theory & practice of care coordination.
- The link between medical home and specialists.





# What is Care Coordination?

*“Care coordination is a function that helps ensure that the patient’s needs and preferences for health services and information sharing across people, functions, and sites are met over time. Coordination maximizes the value of services delivered to patients by facilitating beneficial, safe, and high quality patients’ experiences and improved health care outcomes.”*

National Quality Forum



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# What is Medical Home?

*“The medical home is defined as an approach to providing comprehensive primary care... that facilitates partnerships between individual patients, and their personal providers, and when appropriate, the patient’s family. The provision of medical homes may allow better access to health care, increase satisfaction with care, and improve health.”*

Joint Principles of the Patient Centered Medical Home  
(March 2007)



# Walk Through the Project

Victor Villagra, MD

Health and Technology Vector



# Project Goals

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- Develop care coordination model for patients with Type 2 diabetes and cardiac comorbidities, in a medical home, primary care based setting using electronic health records (EHRs).
- Increase and standardize communications, via electronic tools, between primary care physicians and specialists (cardiologists).
- Maximize the use of EHRs to support care coordination and test care coordination metrics.



- Two pilot sites, each with different needs for care coordination, based on its size, patient mix, staffing levels and style of practice to test ways of improving coordination of care in ambulatory settings.

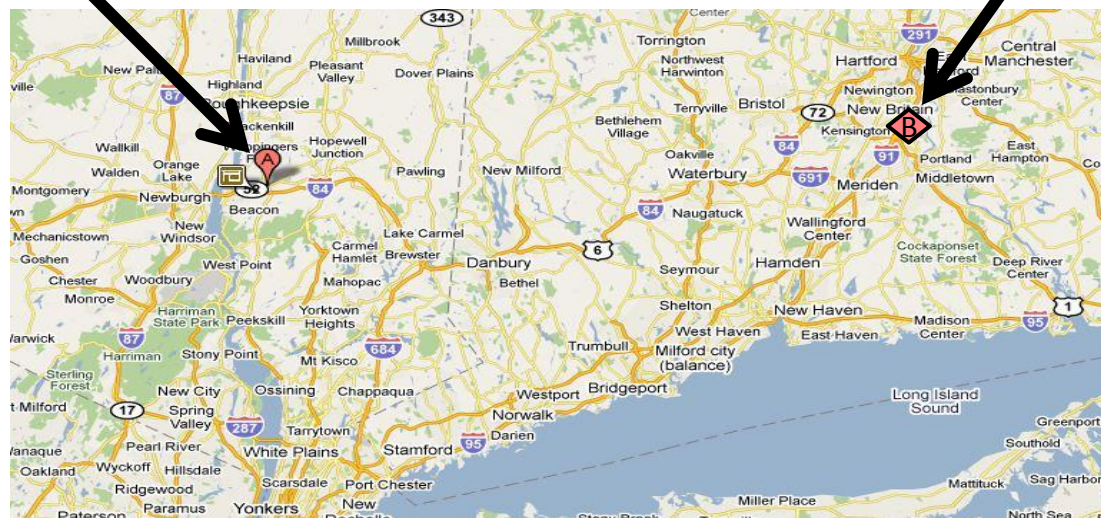


## Taconic IPA

- Large association of practices serving 9 counties
- More than 1300 practices (close to 4000 MDs)
- Practice sizes range from Solo to more than 100 providers
- FQHC/Private Practice/Hospital Owned
- 305 primary care providers have achieved NCQA Level 3 recognition

## Community Health Center, Inc.

- Twelve locations throughout the state
- Over 80,000 patients including over 2,000 adult patients with type 2 diabetes.
- Fifty-five percent are Hispanic in the agency's two largest centers (CHC New Britain and CHC Meriden)
- At the time no plans for NCQA MH accreditation



# Assembling Care Coordination

- Active partnership with patient
- Workflows
- Staffing and roles
- Care planning
- Business issues
- Enabling technology





# Cross-Specialist Care Coordination, Ideally



## Medical Home

- Partners with patient and families
- Crafts and oversees care plan
- Knows all others treating patient
- Defines specialist roles
- Reconciles medications

## Cardiologist

- Knows patient's medical home
- Responds to specific requests
- Keeps updated care plan (including between visits changes)
- Communicates with medical home





# Methods

- Sixty patients at CHC site, 59 at TIPA site, with Type 2 diabetes and heart disease.
- Data collected before and after six-month demonstration period.
- Multi-model data collection methodology
  - 30 care coordination metrics, at each site, number and magnitude of improvement categorized as small (10-29%) or large (30+%).
  - Number of recorded referral was too small to measure, due to absence of data.
  - Examine patients' EHRs, attachments to electronic records, manual registries and separate scheduling systems.
- Taconic IPA interviewed a small sample of patients about experiences with care coordinator. CHC did not conduct patient interviews.
- Care coordinators from each site provided anecdotal accounts of how patients benefitted from care coordination.
- PCPs and cardiologists from each site interviewed before and after demonstration period.



# Experiences on the Ground

Community Health Center, Inc.

Deb Ward, RN, Community Health Center, Care  
Coordinator

&

Taconic IPA

Paul Kaye, MD, Taconic IPA, Medical Director



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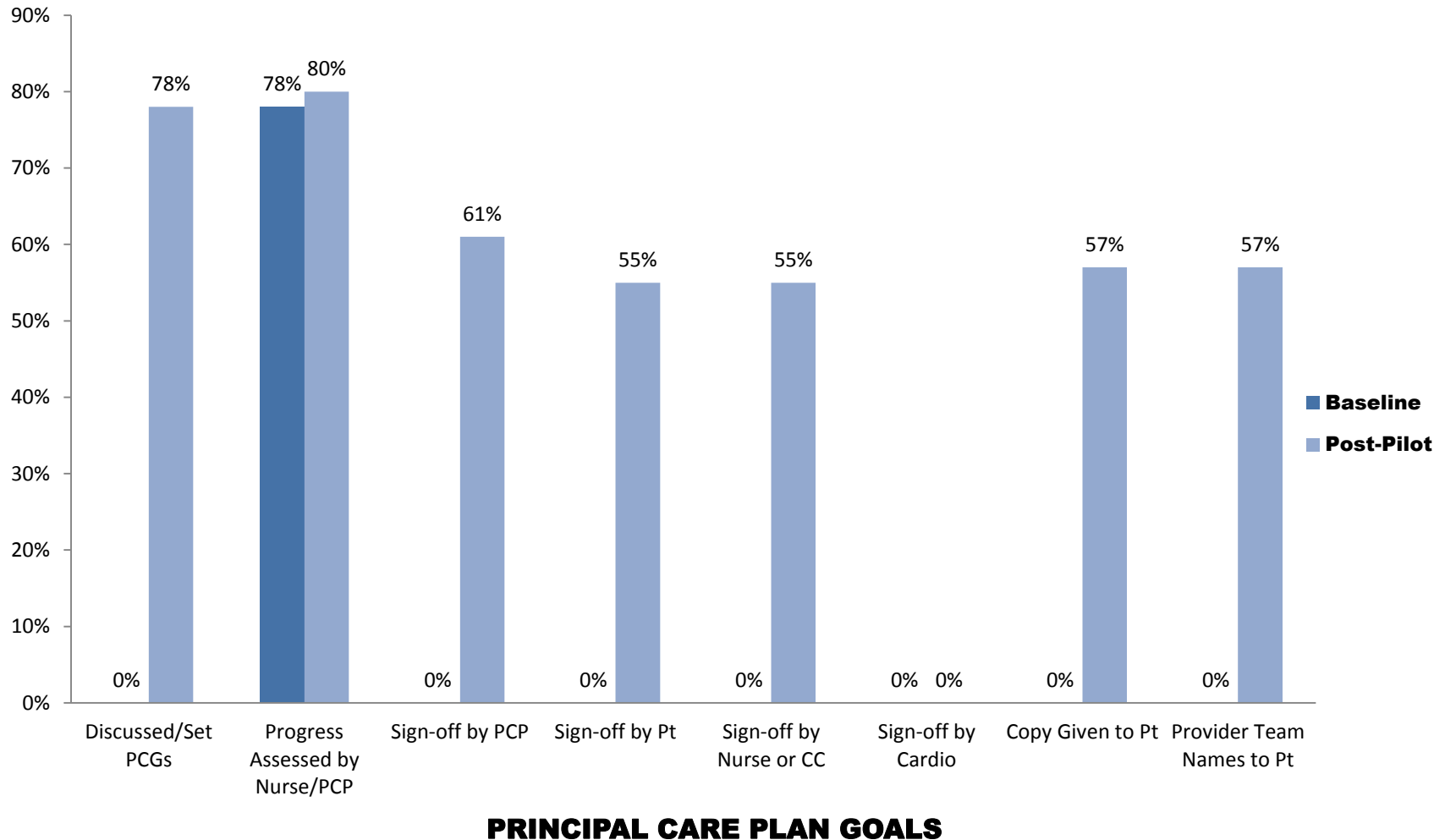
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## Community Health Center, Inc.

- Mature medical home processes and high scores on many of the CC metrics at baseline, including medication reconciliation.
- Improved processes:
  - adopted a common referral form for cardiology, and
  - raised the percent of referrals that included specific instructions to cardiologists.
- Changes produced increase in:
  - Rates of information given to the patient at each visit
  - Care goals set
  - Goals signed off by providers and patients, and
  - Summaries received by primary care physicians from cardiologists.



# Pre – Post Data on Care Coordination for Community Health Center, Inc. (CHC)

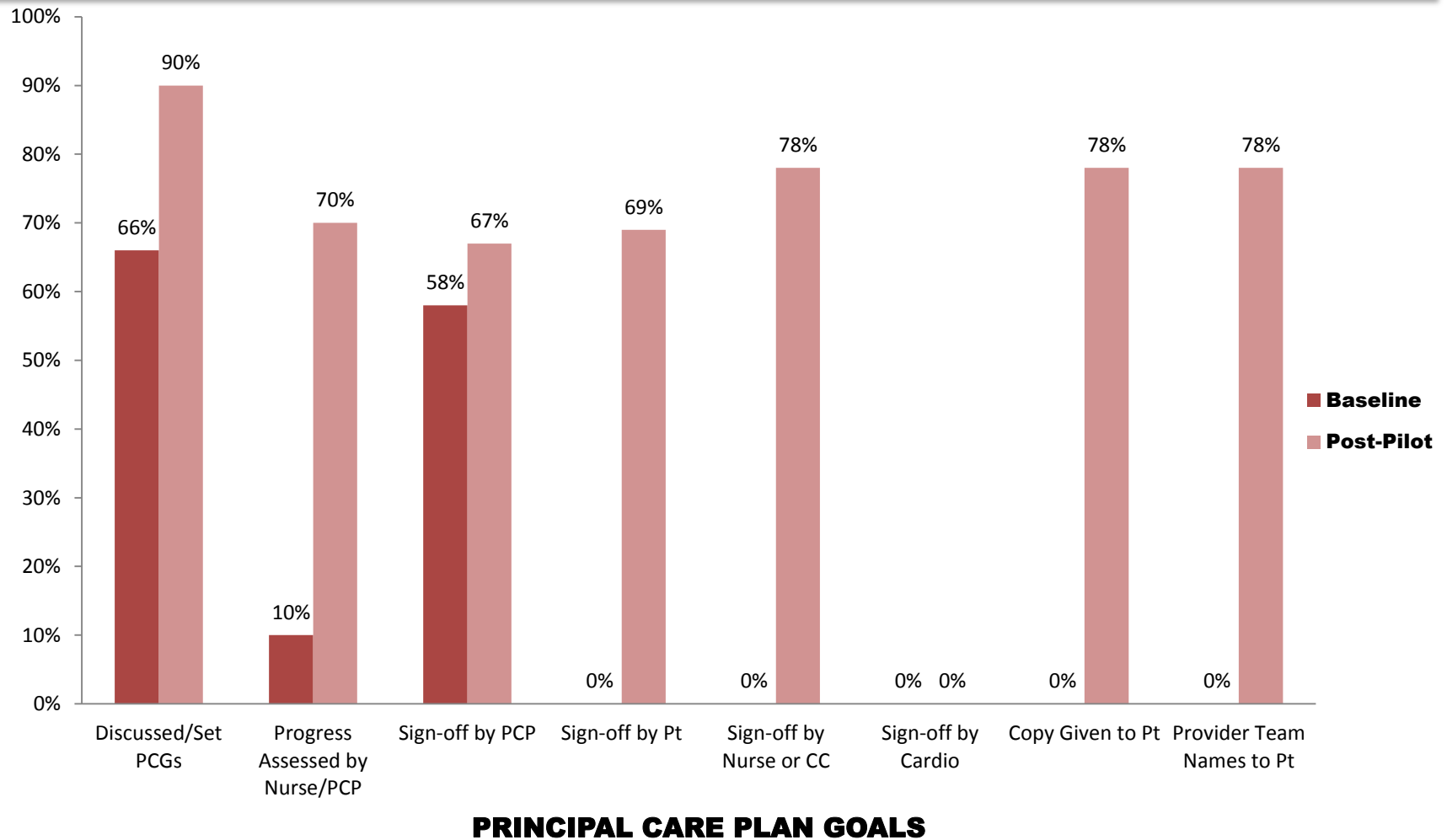


## Taconic IPA

- Started at a different baseline on systematic processes; it made improvements in:
  - Setting care goals,
  - Reconciling medications,
  - Having patients and providers sign-off on goals, and
  - Giving information to the patient.
  - Adoption of early MH-Cardiology care coordination
- Improved the percent of patients whose cardiologist summaries were received by the primary care physician.



# Pre – Post Data on Care Coordination for Taconic IPA (TIPA)



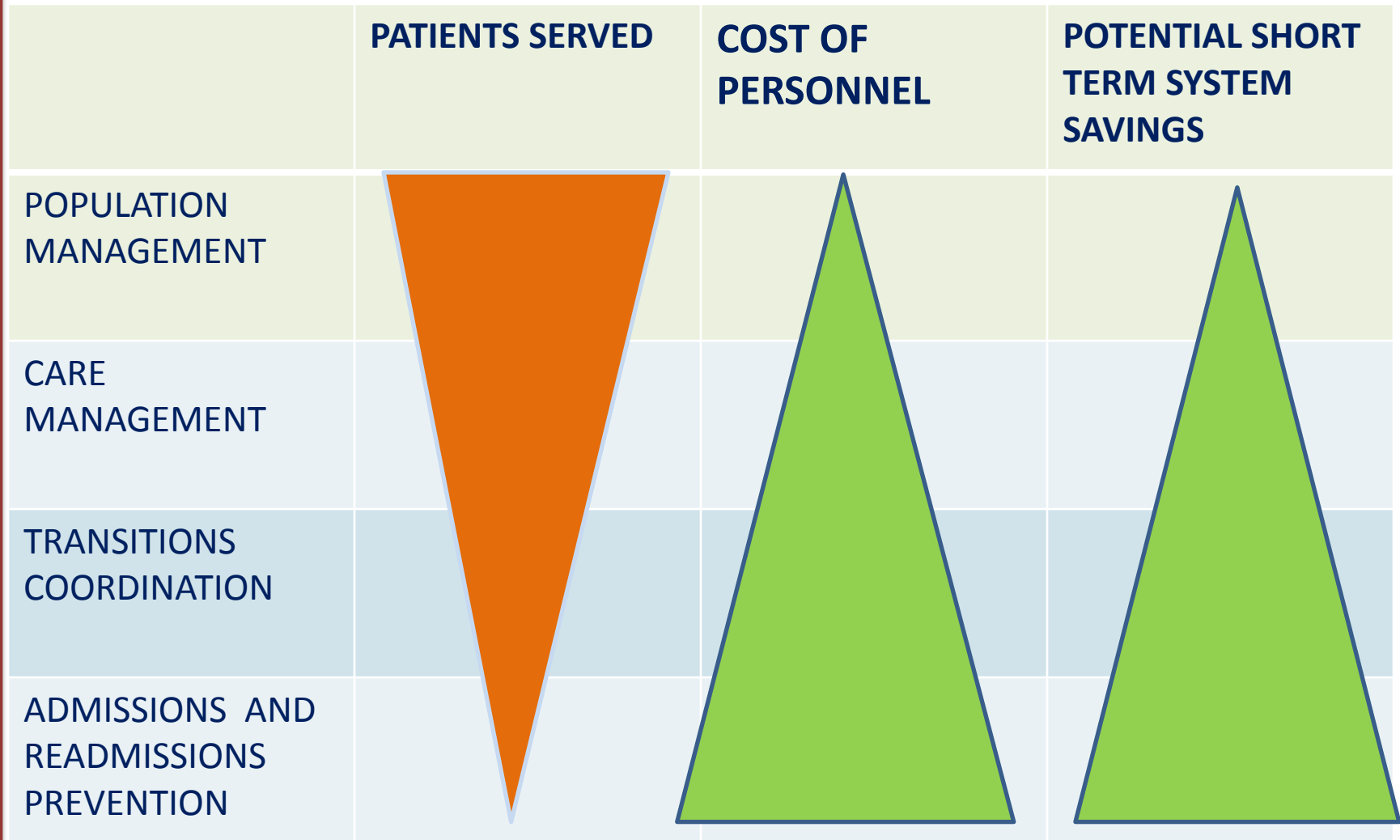
# Care Coordination Elements

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- Population management
- Care management of the chronically ill
- Referral management (urgent and routine)
- Transitions coordination
- Reducing readmissions
- Coordinating care for special populations



# Care in the Medical Home



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Source: Taconic IPA, not for distribution



# Lessons Learned

Victor Villagra, MD  
Health and Technology Vector



# Phase I Findings

During six months, improvements in:

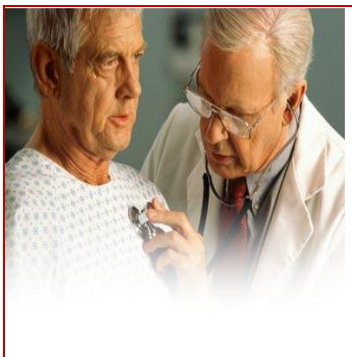
- Care planning,
- Content of manual communications
- Intra-office coordination
- More advanced and effective use of EHRs
- Stepped up patient coaching
- Substantive upgrades in referral requests to specialists
- Enlarged nursing role
- Information sharing with patients and families.



# Lessons Learned: Care Coordination Barriers

- Lack of incentives and bridging technology for cardiologists to use Care Plan Summaries (i.e.: review and agree to principle care goals) they perceived as not important to the cardiac condition.
- Cardiologists thought information about diabetes care goals in Care Plan Summaries were not helpful.
- Care Coordination requires ongoing explicit three-way communication between patient, PCP and cardiologist.

PCP



Patients



Cardiologists



# Lessons Learned About Care Coordination



## Medical Home

- CC includes care planning tool
- You **can** engage the patient
- Workflow trumps IT
- Nurses make CC work



## Communication

- EHRs make CC possible, in part
- People still move data between EHRs
- Additional EHR functionalities “wish list”



## Specialist

- Clinical integration (cardiology- diabetes) needs new tools and mind set
- Need incentives to coordinate with PCP

Patients: Stratifying the most complex may make CC affordable



# Lessons Learned About Care Coordination

- Initiating change is a major task in itself.
  - Care coordination processes not built or fully utilized.
  - A number of providers had to be convinced to accept and support better care coordination.
- Most significant improvements in medical home came with building foundations of care coordination, including identification of “principal care team”, care planning tools, and medication reconciliation.
- Smaller improvements in inter-office coordination between PCPs and cardiologists.
- EHRs systems used at both sites had functions that support care coordination that the sites are not using but additional features are needed
- Presence of a care coordinator improved information transfer and patient engagement - both central to the medical home concept.
- Care coordination is fully nurse dependent (with physician support). Care coordination is a distinct and separate function from nursing, more than a physician function within medical home environment.



# Questions & Answers



# Follow Up Contact Information

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