# CDC Coffee Break: Evaluating Team-Based Care

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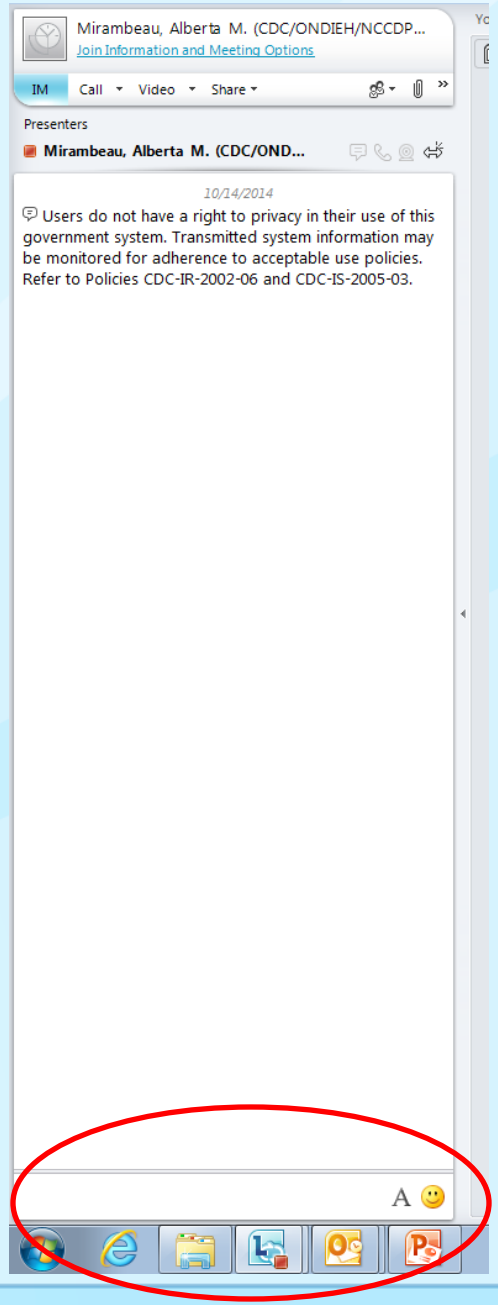
# Before we begin…

- All phones have been placed in SILENT mode
- To ask a question, simply click in the chat box located in the bottom left corner of your screen
- Time permitting, your question will be answered at the end of the presentation



*Disclaimer: The information presented here is for training purposes and reflects the views of the presenter. It does not necessarily represent the official position of the Centers for Disease Control and Prevention.*

# Overview

- What is Team-Based Care?
- What are some strategies for evaluating Team-Based Care?
- How do you prioritize activities when evaluating Team-Based Care?

## Just so you know…

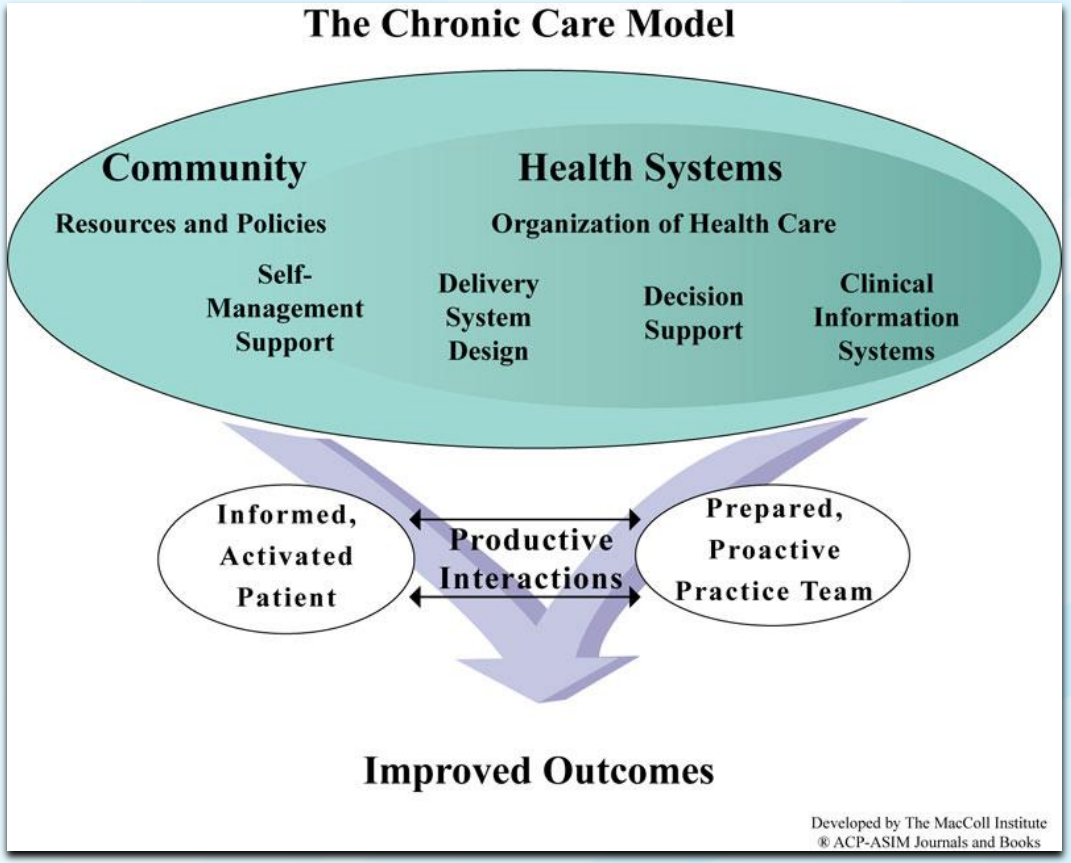
# Today's session is an introduction, and not a "how-to" session.

# What is Team-Based Care?

- **Team-based health care is the provision of health services to individuals, families, and/or their communities by at least two health providers who work collaboratively with patients and their caregivers—to the extent preferred by each patient—to accomplish shared goals within and across settings to achieve coordinated, high-quality care**

Naylor MD, Coburn KD, Kurtzman ET, et al. (2010). Inter-professional team-based primary care for chronically ill adults: State of the science. Unpublished white paper presented at the ABIM Foundation meeting to Advance Team-Based Care for the Chronically Ill in Ambulatory Settings. Philadelphia, PA.

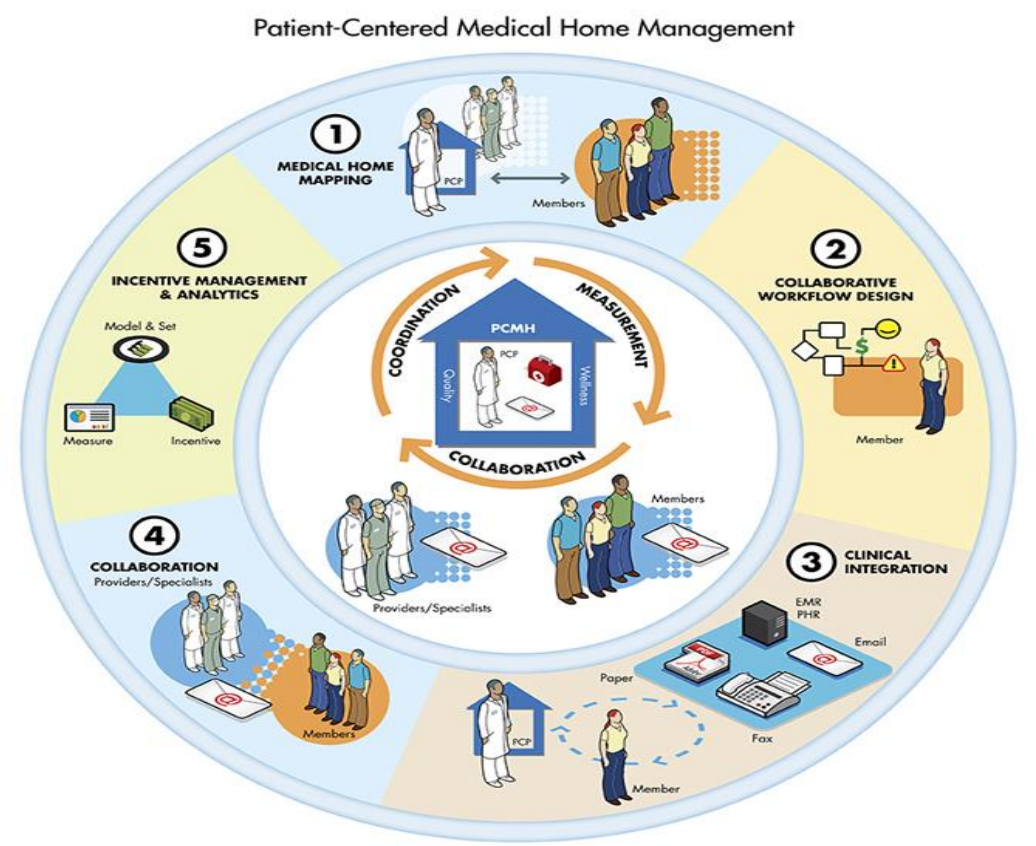
# History of Team-Based Care




- **Chronic Care Model from the 1990s**
- **Developed by Ed Wagner, PhD, MPH, to address prevalent chronic conditions**
- **Focused on:**
  - Better collaboration, care coordination, decision support
  - Involving patients "actively" in their own care
  - Supporting patient self-management and knowledge

Guide to Community Preventive Services. Cardiovascular disease prevention and control: Team-based care to improve blood pressure control. www.thecommunityguide.org/cvd/teambasedcare.html. Review Completed: April 2012

# History of Team-Based Care Cont.




- **Evolved into <u>Patient-Centered Medical Home Model (2004)</u>**
- **Focused on:**
  - Implementing practice teams
  - Supplemented by systems support (e.g., IT systems for clinical information, surveillance)
  - Community Clinical Linkages

Guide to Community Preventive Services. Cardiovascular disease prevention and control: Team-based care to improve blood pressure control. www.thecommunityguide.org/cvd/teambasedcare.html. Review Completed: April 2012

# Typical Team-Based Care Intervention Components

## Practice and Patient Support Components

- Patient education on medication
- Drug profile assessment
- Medication compliance assessment
- Adherence plan/Adherence tool
- Treatment algorithm/Decision tool
- Patient education on chronic disease
- Lifestyle counseling
- Proactive follow-up visits/ Telephone contacts
- Patient reminders
- Other self-management training and support for patients
- Provider reminders
- Other provider education
- Supervision/Provider assessment and feedback
- Home/Outreach visit
- Tracking response to treatment

## Systems Components

- EMRs/EHRs
- Clinical Information Systems
- Relay of Clinical Data
- Other tech-enabled resources
- Other enhanced case record/Data collection system

Guide to Community Preventive Services. Cardiovascular disease prevention and control: Team-based care to improve blood pressure control. www.thecommunityguide.org/cvd/teambasedcare.html. Review Completed: April

# What is Important to Evaluate?

- **Process**
  - Program Description
    - Who makes up the team?
    - What are the team's protocols and procedures?
    - What are the core components of the team's successes?
- **Process**
  - Engagement Description
    - How successful has our health system engagement been as it relates to expanding team based care?
    - What are the core components to integrating health care extenders into a clinical team?
- **Outcomes**
  - Clinical Outcomes
    - Blood pressure control
    - Hemoglobin A1C
    - Medication adherence
- **Outcomes**
  - Clinical Outcomes
    - Policies that promote a team approach
    - Systems that promote a team approach

# Who Makes Up The Team?

- Nurse
- Provider
- Pharmacist
- Health Educator
- Social Worker
- Community Health Worker
- And others…

# What Are The Protocols And Procedures?

- How are team members trained to perform their care functions?
- Is there use of an EHR, registry, etc.?
- Describe the patient experience.
- What are the core components of the team?
- Is the team sustainable?

# How Do We Show Effectiveness?

- What data do we need?
- Where is the data?
- How do we access the data for evaluation purposes?
- What do we need to be able to show success?

# Now We Know What We Need To Know…How Do We Find The Answers?

- Interviews
- Observation
- Document Review
- Secondary Data Analysis

# EXAMPLES OF TEAM-BASED CARE EVALUATIONS

# Examples of Evaluation of Team-based Care

- **DCAS (Diabetes Care in American Samoa) (DePue et al., 2013)**
  - Intervention: Primary care based nurse-community health worker team to support diabetes self management on diabetes control and other biologic measures
  - Target population: Samoans with type 2 diabetes
  - Data collection: Hba1c, dietary intake, physical activity, psychosocial measures
  - Results: Hba1c levels significantly lower in the nurse-community health worker team participants compared to usual care

DePue JD, Dunsiger S, Seiden AD, Blume J, Rosen RK, Goldstein MG, Nu'usolia O, Tuitele J, McGarvey ST. Nurse-community health worker team improves diabetes care in American Samoa: Results of a randomized controlled trial.. Diabetes Care. 2013 Jul;36(7):1947-53. doi: 10.2337/dc12-1969. Epub 2013 Feb 7.

# Examples of Evaluation of Team-based Care

- **Physician-pharmacist team (Pape et al., 2011)**[1]
  - Intervention: Remote physician-pharmacist team-based care on cholesterol levels among patients with diabetes
  - Target population: Patients with diabetes mellitus
  - Data collection:
    - LDL-C levels, Hemoglobin A1c, blood pressure
    - Patient satisfaction with diabetes care, cost
  - Results: Physician-pharmacist team-based care resulted in significantly improved LDL-C levels and goal attainment among patients with DM.

Pape GA1, Hunt JS, Butler KL, Siemienczuk J, LeBlanc BH, Gillanders W, Rozenfeld Y, Bonin K. Team-based care approach to cholesterol management in diabetes mellitus: two-year cluster randomized controlled trial. Arch Intern Med. 2011 Sep 12;171(16):1480-6. doi: 10.1001/archinternmed.2011.417.

# Examples of Team-Based Care Interventions

| Carter et al. (2008) | Brennan et al. (2010) |
|---|---|
| ❑ Additional team member: clinical pharmacist<br>❑ Intervention components:<br>▪ Pharmacist suggested goal BP, provided recommendations to improve BP control and education on medication adherence<br>▪ Clinical pharmacist made recommendations to PCP<br>❑ Target population:<br>▪ Patients with hypertension (with and without diabetes)<br>❑ Setting:<br>▪ 5 primary care clinics within 1 university-based system | ❑ Additional team member: nurse<br>❑ Intervention components:<br>▪ Proactive follow-up calls, education on BP self-management, lifestyle counseling, and patient reminders on measuring BP at home<br>▪ Quarterly reports with patients' BP data were given to PCPs<br>❑ Target population:<br>▪ African-American patients with hypertension<br>❑ Setting:<br>▪ Primary care clinics and patients' homes |


•Carter et al. A Cluster-Randomized Trial to Evaluate Physician/Pharmacist Collaboration to Improve Blood Pressure Control. *J Clin Hypertens*. 2008;10(4): 260-271

•Brennan et al. Disease management control to promote blood pressure control among African Americans. *Population Health Management.* 2010; 13(2): 65-72

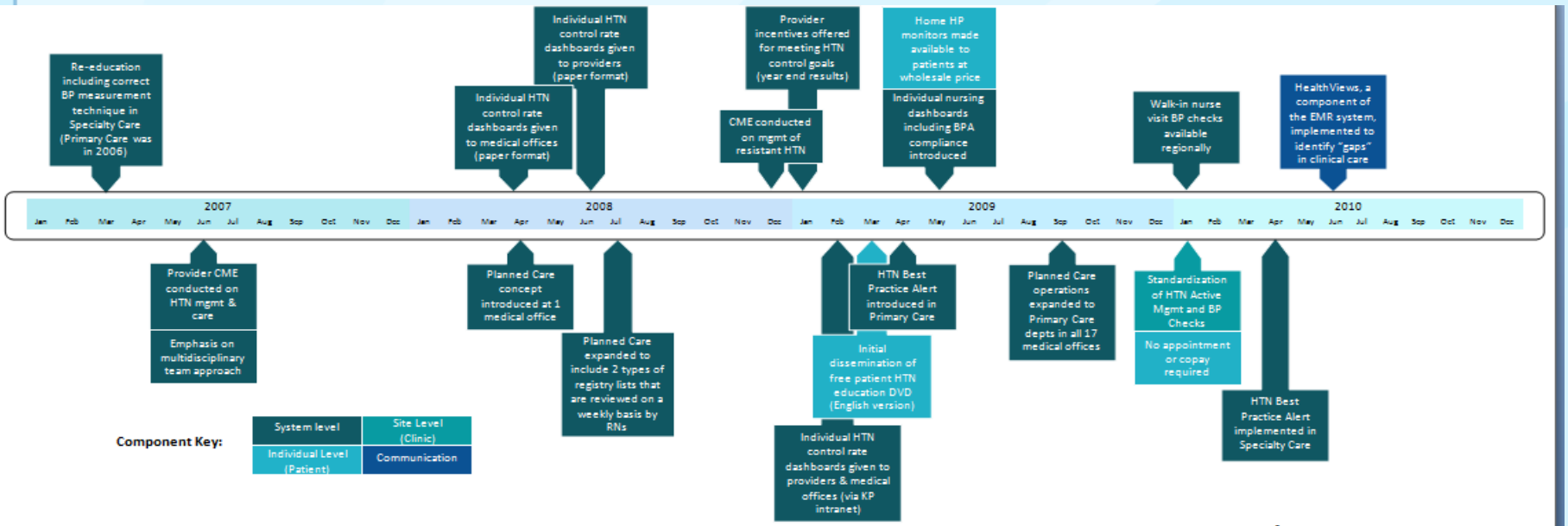
# CDC Example

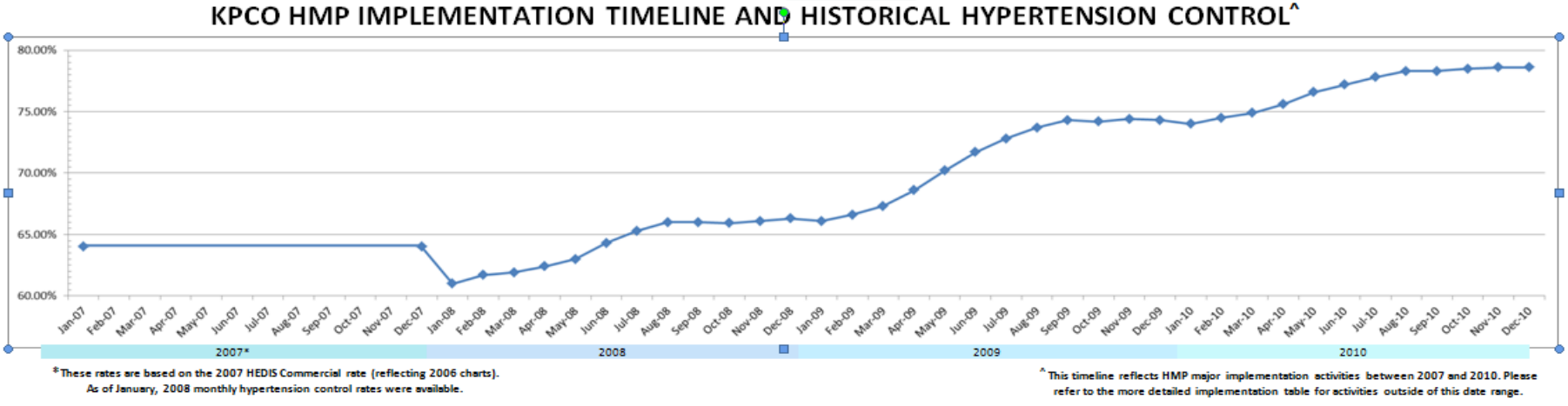
- **At the culmination of DHDSP's 2008 round of evaluability assessments three sites were reviewed. The Kaiser Permanente Colorado (KPCO) Hypertension Management Program was rated highest by the expert panel to undergo rigorous evaluation.** [2]
- **In January 2010 DHDSP began its evaluation of the KPCO Hypertension Management Program:**
  - It is a team based clinical program focused on improving hypertension control rates.
  - It also includes the use of EMRs and home blood pressure monitoring.

# KPCO's Clinical Team

- Physicians
- Nurses (RN, LPN, MA)
- Nurse Practitioners
- Clinical Pharmacists
- Physician Assistants
- Registered Dieticians

# KPCO IMPLEMENTATION TIMELINE AND HISTORICAL HTN CONTROL RATES




*These rates are based on the 2007 HEDIS Commercial rate (reflecting 2006 charts). As of January, 2008 monthly hypertension control rates were available.

^This timeline reflects HMP major implementation activities between 2007 and 2010. Please refer to the more detailed implementation table for activities outside of this date range.

# Summary

- **Evaluation priorities depend on your needs.**
  - Stakeholder Interests
  - Program Improvement
  - Program Replication
- **Select what works for you.**
  - Access to Data
  - Evaluation Resources
  - Available Time/Needs
- **Aim for success!**
  - Evaluation Use

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# We’d like to hear from you…

- Questions and Answers
- Short Poll Questions

# Reminders!

All sessions are archived and

the slides and script can be accessed at:

**http://www.cdc.gov/dhdsp/pubs/podcasts.htm**

If you have any questions, comments, or topic ideas send an email to:

**AREBheartinfo@cdc.gov**

# Next Coffee Break

**There will be no Coffee Break sessions in November and December**

The normal schedule will resume on January 13th, 2014.