Community Outreach and Change for Diabetes Management

COACH 4 DM

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Louisville, KY

KPHReN 2008

- Kentucky Public Health Research Network
  - Robert Wood Johnson Foundation
- Public Health Practice- based Research

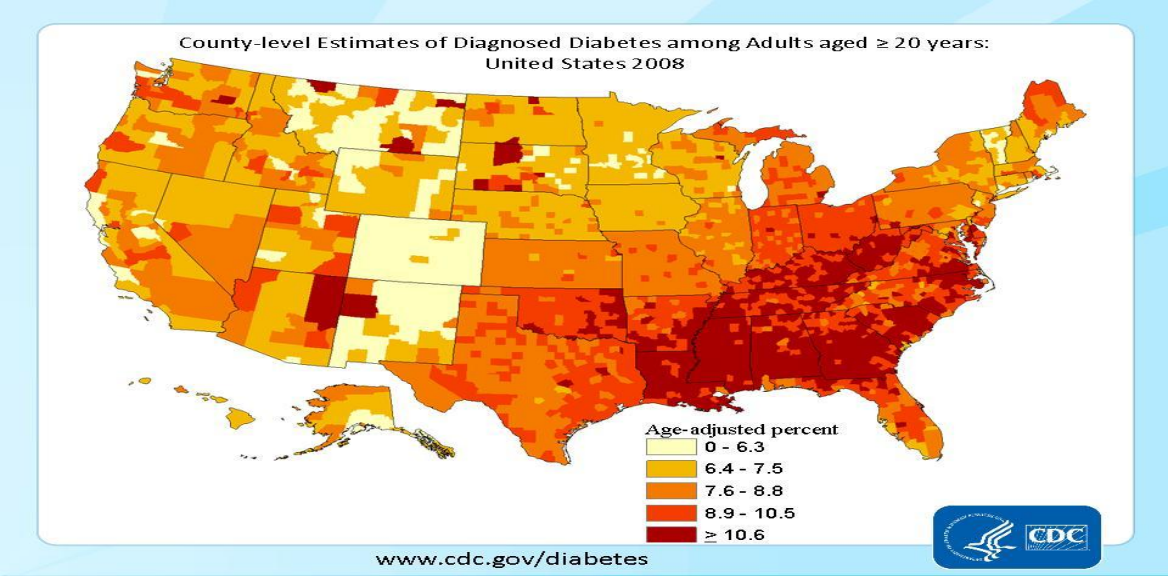
COACH 4 DM Project Aim

- Evaluate the extent to which organizational QI strategies influence the adoption and implementation of evidence- based interventions identified in the Community Guide to Preventive Services
  - Sufficient evidence to recommend that Diabetes Self- Management Education (DSME) be provided to adult diabetics in community gathering places

- Funded by Robert Wood Johnson Foundation

Type II Diabetes in Kentucky

- 11% of KY adults have Diabetes!
  - 9th in the nation
- 6th leading cause of death in KY
- 40% of KY adults have pre-diabetes
- Estimated costs > $3 billion



COACH 4 DM Goals

Overall Purpose:

- Test whether evidence- based QI strategies lead to systems changes and process improvements within health departments

COACH 4 DM Methods

- Study Participants
  - Six KY Diabetes Centers of Excellence (DCOE)
    - QI Champion
    - QI Team (4-6 members)

COACH 4 DM Methods

Change Facilitation

- Facilitate each team in design and implementation of a QI project to improve the delivery of existing DSME services
- Trained change facilitators
  - UK Center for Rural Health
    - Previous experience (primary care practice)

Change Facilitation

- Three ½ day sessions
  - Overview of QI methods
    - Specific QI tools
  - Facilitate PDSA
  - Provide additional QI training as needed
  - Available throughout project time period

COACH 4 DM Methods

- Survey Study
  - Knowledge of QI
    - General/ specific tools
  - Comfort level using QI
    - General/ specific tools
- Outcome measures

Logic Model

Inputs

- DCOE staff (QI team)
- DSME providers (QI team)
- Change Facilitators
- Time
- Money
- Knowledge
- Community Partners

Processes

- QI tools
- QI training
- Participation in facilitation sessions
- Collaborative conferences
- Social networking

Outputs

- QI activities
- Readiness for change
- Cycles of PDSA
- Data collection
- Program satisfaction

Outcomes

- Change in diabetes outreach: # enrolled in DCOE, # receiving DSME, # completing DSME, # referrals and referral sources, care coordination with PCP, communication with DCOEs, communication with community partners, advertising/ marketing
- Change in DSME delivery: method, location, content, timing, duration, frequency, Spanish availability
- Efficacy
- Adoption/ Implementation of QI activities
- Increased knowledge of QI methods
- Behavior change/organizational climate change

Assumption-Improved outcomes not short term

External Factors-Previous QI experience, organizational climate

Pre- Intervention Survey Findings

- 1 No knowledge/ comfort 5 High knowledge/ comfort

- Reported **high** levels of knowledge and comfort of QI methods **in general**
- Reported **low** levels of knowledge and comfort with **specific** QI tools

Pre/ Post Survey Findings
Knowledge of **Specific** QI Tools

1 No Knowledge

Score 1

PDSA
- Pre 41% Post 9%

RCA
- Pre 44% Post 13%

Fishbone
- Pre 51% Post 17%

Logic Model
- Pre 35% Post 9%

Flow map
- Pre 24% Post 4%

5 Very High Knowledge

Score 4-5

PDSA
- Pre 17% Post 78%

RCA
- Pre 7% Post 54%

Fishbone
- Pre 7% Post 52%

Logic Model
- Pre 20% Post 45%

Flow mapping
- Pre 20% Post 65%

QI Knowledge

- *Since your participation in COACH 4 DM, do you feel that your knowledge of QI methods in general:*

• Strongly increased	30%
• Increased	61%
• Stayed the same	9%

Pre/ Post Survey Findings
Comfort Using Specific QI Tools

1 No Comfort

Score 1

PDSA
- Pre 52% Post 9%

RCA
- Pre 58% Post 22%

Fishbone
- Pre 51% Post 22 %

Logic Model
- Pre 52% Post 17%

Flow map
- Pre 31% Post 4%

5 Very High Comfort

Score 4-5

PDSA
- Pre 10% Post 68%

RCA
- Pre 7% Post 26%

Fishbone
- Pre 7% Post 48%

Logic Model
- Pre 14% Post 28%

Flow mapping
- Pre 24% Post 57%

Comfort Using QI Methods

- *Since your participation in COACH 4 DM, do you feel that your comfort level using QI methods in general:*

• Strongly increased	21%
• Increased	70%
• Stayed the same	9%

Influence of COACH 4 DM

- *Since participating in COACH 4 DM, have any new QI initiatives been started?*
  - Yes **52%**
  - No 30%
  - Don't know 17%
- *If yes, do you feel this was influenced by participation in COACH 4 DM?*
  - Yes **66%**
  - No 8%
  - Don't know 0%

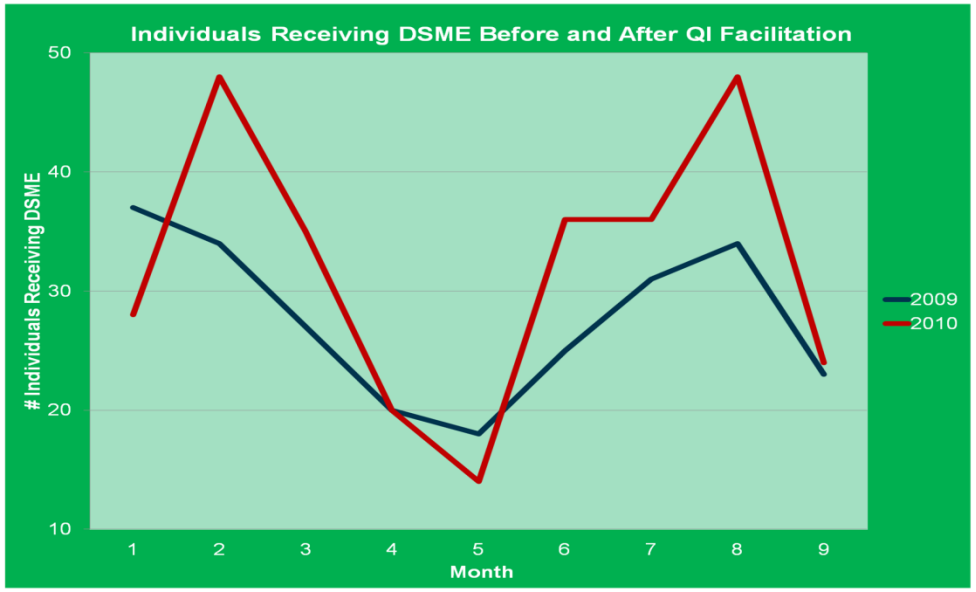
Influence of COACH 4 DM

- *Are any new QI initiatives being contemplated in your HD?*
- Yes- 82%

- *Do you feel this was influenced by participation in COACH 4 DM?*
- Yes- 75%

Changes in DSME Outreach and Delivery

- 50% DCOEs changed location of DSME sessions
- 50% changed timing of DSME sessions
- Increase in number of healthcare providers who refer patients for DSME
- Increase in total number of referrals
- Increase in mean # of persons attending DSME per month from 28 to 32
- Increase in number of persons completing DSME series



Summary

- Increase in knowledge and comfort level in general and with specific tools
  - PDSA
  - Fishbone diagramming
- Most sites are starting or contemplating a new QI initiative
  - Strong influence of COACH 4 DM

Summary

- Improvements in service delivery and outreach
  - Expanded locations and times
  - Increased referrals and referral base
  - Increased numbers of people attending and completing DSME
- Effective aspects of COACH 4 DM
  - Development of QI team
  - Project facilitation

- QI in LHD is Achievable & Sustainable

Barren River District Health Department

COACH 4 DM

Crissy Rowland, MPH, CHES

Project Description

- DSME/T classes- poor attendance
- Increase attendance by 15% in 8 counties

QI Methods/Tools

- Aim Statement
- Process (Flow) Map
- Root cause analysis using a fishbone diagram
- Logic Model
- PDSA Worksheets for advertising, key informant interviews and class scheduling

Intervention:

- Advertising
- Key informant interviews with 4 providers
- Data Collection from sign-in sheets
- Class scheduling

Overall Impact

- Created conversations internally on how to improve our marketing efforts for all program (providers).
- Big Picture……preparing all staff and programs for Accreditation and creating a QI culture.

What has happened since COACH 4 DM?

- Currently piloting a provider referral process
- Developed Diabetes Basic Class

Lincoln Trail District Health Department

COACH 4 DM

Mechelle Coble MS. RD. LD. CDE.

COACH 4 DM Project

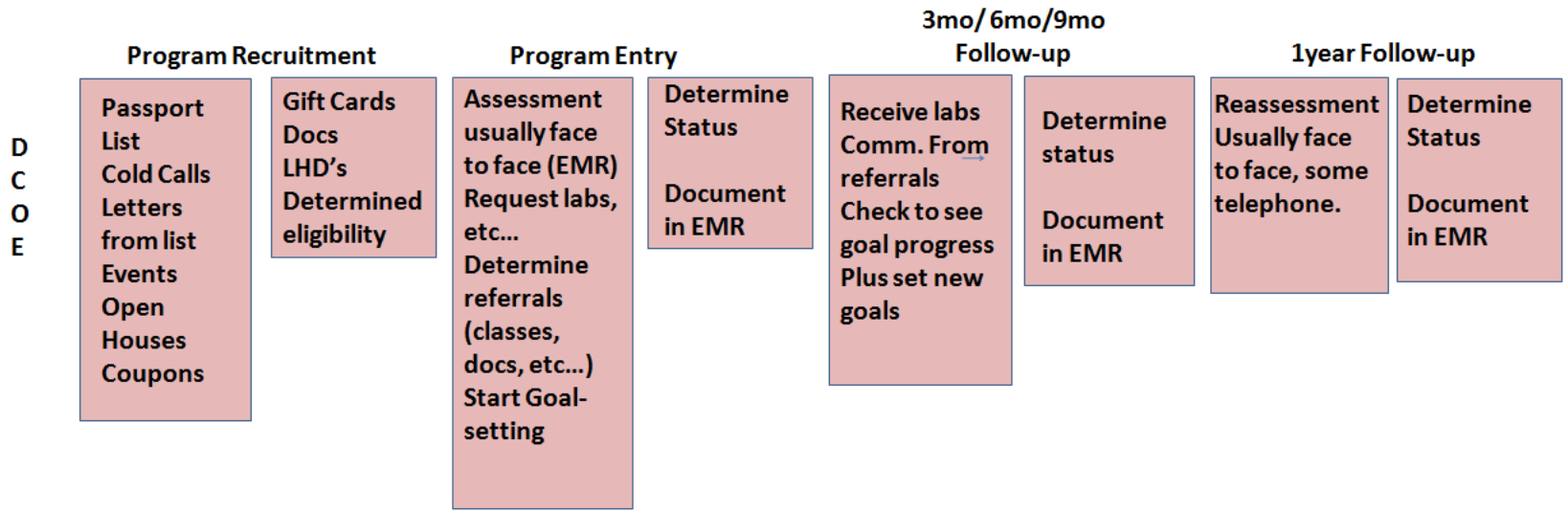
- Evaluate our
  - Strengths
  - Needs
  - Where we go from here

What Are We Doing Now? Brainstorming

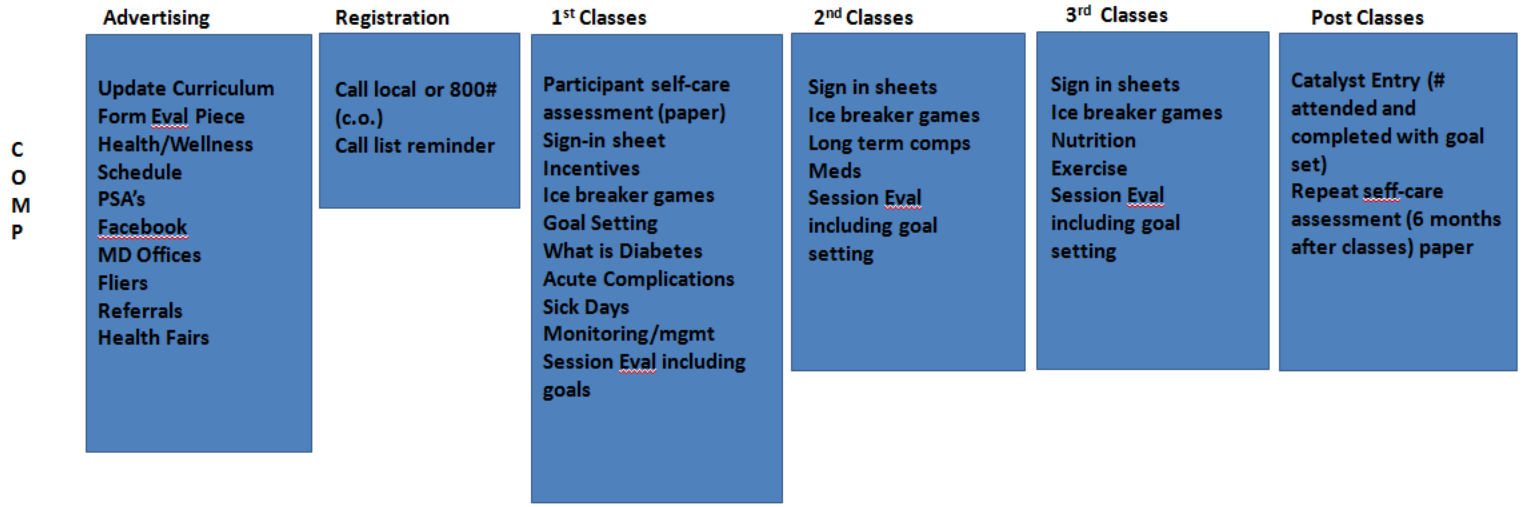
What is DCOE, and What is KDPCP?

Some are in both programs

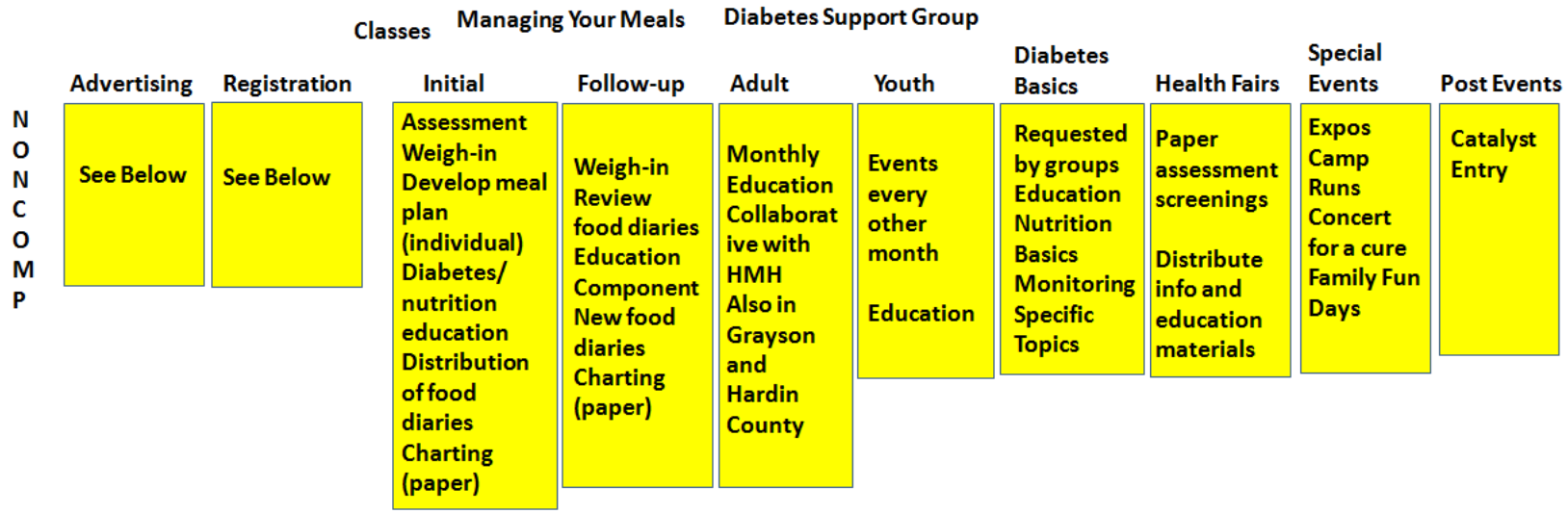
Process for How We do It? DCOE



Process for How We do It? DSME



Process for How We do It? Classes



How Could I Expand?

	Program Recruitment	Program Entry		KDPCP	Continual Follow-up	6-Month Progress	1year Follow-up	
FREE CLINIC	Clinic List Phone Survey Incentives Clinic Referral Event Meals on Budget	Phone or Face to Face Assessment Television Education Brochures Referrals Charts	Determine Status Document in Appropriate Electronic Program	DSME Managing Your Meal Programs Diabetes Non-Comp Education Events	Labs Chart Review Referrals Set Goals/ Review Progress	Bi-annual Report Evaluate Program Make Changes to Program	Formal Patient Re-assessment Determine Status Document in Appropriate Electronic Record	Annual Report Re-evaluate Program Make Changes

Poster Presentation

COACH 4 DM Project

Special thanks to KPHREN, our "Team Manager", for the opportunity to work on this project!

Meet the Players!

HOME

LINCOLN TRAIL DISTRICT HEALTH DEPARTMENT
Population served (all counties): 159, 806

Diabetes Control Programs and Services:
*Diabetes Self-Management Education/Training
*Managing You Meals classes
*Diabetes Center of Excellence (DCOE) case management program for Medicaid/Passport patients
*Collaboration with the Hardin-LaRue Diabetes Coalition to promote diabetes awareness and prevention locally
*Statewide activities to promote diabetes awareness and prevention throughout Kentucky
*National presentations for improving diabetes education
*And more....

COMMUNITY HEALTH CLINIC OF HARDIN-LARUE COUNTIES
Began seeing patients in 2002
Open: Tuesdays and Thursdays, 5:00 pm – 9:00 pm
Fully volunteer staff

Patients must be at or below 185% of Federal Poverty Level in order to qualify financially for services. In addition, they must be residents of Hardin or LaRue County, without health insurance, and qualify for services under one of the following criteria:
- Persons gainfully employed, who meet the income criteria, and their dependents
- Persons who are full-time students
- Persons receiving disability income without insurance and their spouses
- Persons unemployed less than 12 months
- Persons claiming child support as sole source of income
- Persons moving to Kentucky awaiting Medicaid Benefits

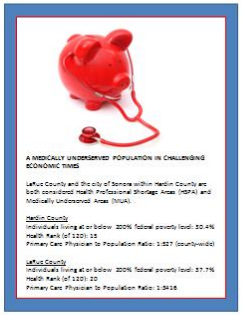
HARDIN COUNTY STATS
Population size: 99,770
Population density (people per square mile): 154 (approximate)
Individuals living at or below 200% federal poverty level: 30.4%
Health Rank (of 120): 15
Uninsured population (under age 65): 17.7%
Primary Care Physician to Population Ratio: 1:827

LARUE COUNTY STATS
Population size: 13,868
Population density (people per square mile): 52 (approximate)
Individuals living at or below 200% federal poverty level: 37.7%
Health Rank (of 120): 20
Uninsured population: 20.5%
Primary Care Physician to Population Ratio: 1:2416

AWAY

UNCONTROLLED DIABETES

Diabetes Condition	Hardin County	LaRue County	National Benchmark	National Severe Benchmark
Short-term complication admission rate	53.5	55.3	46.7	80
Long-term complication admission rate	81.5	92.1	112.6	160.3
Uncontrolled diabetes admit	5.5	9.2	27.2	61.1
Lower extremity amputations	44.2 (200% below PR, 68.5)	64.6 (95.9)	37.5	65.7
Age-Adjusted Prevalence	11.7 (82.0)	10.7	8.5	7.6



A MEDICALLY UNDERSERVED POPULATION IN CHALLENGING ECONOMIC TIMES

LaRue County and the city of Sonora within Hardin County are both considered Health Professional Shortage Areas (HPSA) and Medically Underserved Areas (MUA).

Hardin County
Individuals living at or below 200% federal poverty level: 30.4%
Health Rank (of 120): 15
Primary Care Physician to Population Ratio: 1:827 (county-wide)

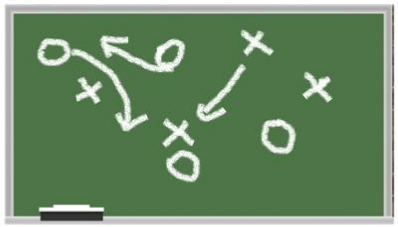
LaRue County
Individuals living at or below 200% federal poverty level: 37.7%
Health Rank (of 120): 20
Primary Care Physician to Population Ratio: 1:3416

LIMITED INSURANCE ACCESS

HARDIN COUNTY
Uninsured population: 17.7%

LARUE COUNTY
Uninsured population: 20.5%

The Playbook



In reviewing our "teams" of patients with diabetes we found:

Team A – Medicare, Medicaid, Passport Coverage
Team B - Third Party Payors
Team C - Uninsured

Problem: Our uninsured patients with diabetes, while they may be able to have a medical home through our community clinic to obtain medications, meters , strips, or other immediate needs, there is no longer-term case management service available to help ensure a reduction of the risks associated with diabetes.

Hypothesis: Our DCOE team can use its managed care program to reach into other areas including our low economic and uninsured population in order to reduce cost and improve patient outcomes.

Running the Play

Research:
Personnel meetings between clinic and health department staff

Outreach telephone survey developed to determine what patients feel their needs are

Clinic visits to obtain patient contact information

Incorporation of resources such as public health students, health department staff, and diabetes program case managers

Developed a healthy cooking on a budget event to engage patients in the beginning of the program

Future plans include the use of our DiaWEB internet-based case management system in order to provide statistical data and track patient outcomes.

What's the Score?

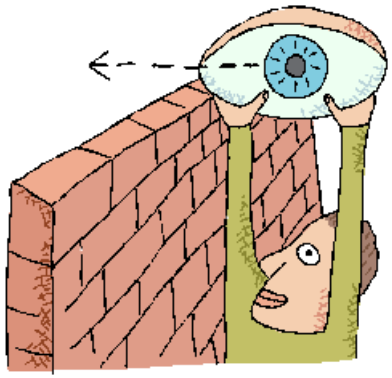
Lincoln Trail District Health Department
Diabetes Program

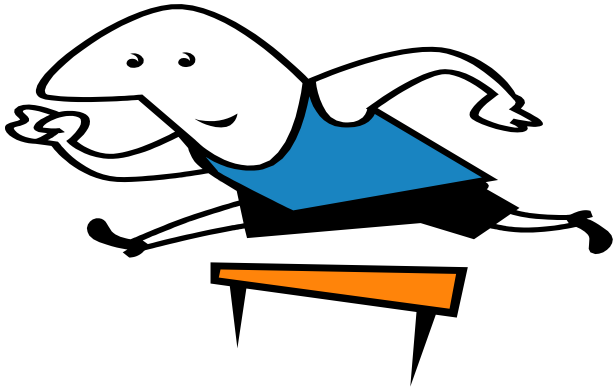
What We Did	How We Did
Meetings with clinic staff and health department administration	Buy – in achieved
Public health student placed calls to contact phone numbers obtained	18/43 reached
Public health student surveyed those patients she was able to reach by phone	18/18 interested in managed care program
Development and implementation of healthy cooking on a budget class	In process

Next Steps:

Continue to use strategies learned to develop program

Work on taking our program to these venues





Madison County Health Department
COACH 4 DM

Kim DeCoste

Purchase District Health Department

COACH 4 DM

Julie Muscarella RD LD CDE

COACH 4 DM Project

- "Think outside the box"
  - Class locations
  - New sources for referrals
- Evaluate our
  - Strengths
  - Evidence-based practices
  - Weaknesses

Questions asked initially:

What Are We Doing Now?

Is it working?

One technique utilized:

Brainstorming

>Outreach strategies for referrals

>Venues for classes

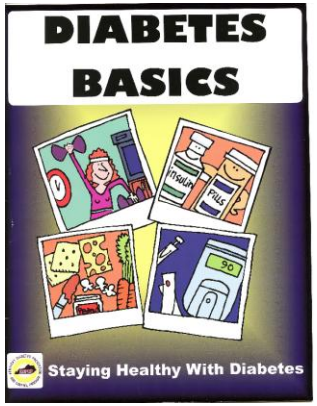
Brainstorming >>> Fishbone

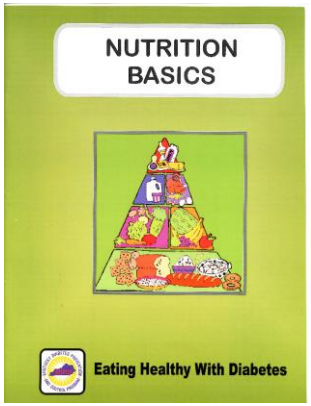
Materials

Process

People

MATERIALS from Kentucky Diabetes Prevention and Control Program





Prediabetes Curriculum

Coming Soon

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Kentucky Diabetes Prevention & Control Program Curriculum

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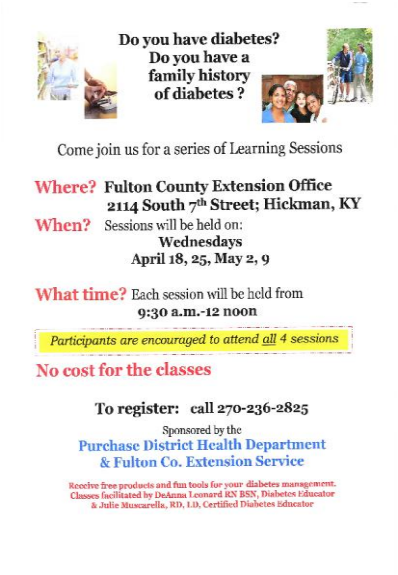
PROCESS



Do you have diabetes?
Do you have a family history of diabetes ?

Come join us for a series of Learning Sessions

Where? Fulton County Extension Office
2114 South 7th Street; Hickman, KY

When? Sessions will be held on:
Wednesdays
April 18, 25, May 2, 9

What time? Each session will be held from
9:30 a.m.-12 noon

Participants are encouraged to attend all 4 sessions

No cost for the classes

To register: call 270-236-2825

Sponsored by the
Purchase District Health Department
& Fulton Co. Extension Service

Receive free products and fun tools for your diabetes management.
Classes facilitated by DeAnna Leonard RN BSN, Diabetes Educator
& Julie Muscarella, RD, LD, Certified Diabetes Educator

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Invitation letter to area providers, our mailing list and other partners such as extension offices, pharmacies, and Kentucky Homeplace

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Press Releases To local media outlets

PEOPLE

- Basic Class
- Survival Skills

leading to

- Comprehensive Class

POSTER
&
Follow up statistics

Study Results

Questions?