Innovative State Strategies for Diabetes Prevention

March 3, 2020
2:00 pm - 3:30 pm ET
Audio US: +1 646 876 9923;
Meeting ID: 310 809 672
Welcome and Introductions
The Diabetes Garage

A tailored program to engage men in diabetes self-management

Jeannie B. Concha PhD MPH
Funding

1. Texas Department of State Health Services funding 2019-2023
2. The University of Texas at El Paso

Disclosures to Participants

1. No conflicts of interest
How many of you own or use an automobile on a daily basis?
What is The Diabetes Garage SM

- A tailored diabetes self-management program

- Integrate automotive maintenance and repair analogies programmatically:
  - to engage men in diabetes education programs
Tailor Treatment to Reduce Disparities in Diabetes

- Providers should assess social context, including potential food insecurity, housing stability, and financial barriers (A-grade)
- Patients should be referred to local community resources (B-grade)
- Provide patients with self-management support from lay health coaches, navigators, or community health workers (A-grade)
What is The Diabetes Garage℠

Three Delivery Modes

(1) **Educational Workshops**: four 2-hour weekly educational sessions with a diabetes educator and automotive instructor, and a The Diabetes Garage Handbook and Diabetes Essentials Toolbox.

(2) **Website**: a website with informational videos and Facebook private group page.

(3) **Open Garage**: a quarterly mock garage to consult with a CDE or diabetes educator engage in diabetes “shop talk”.
A Texas Program

Three sites

1. El Paso
2. San Antonio
3. Harlingen
Why the Diabetes Garage?

Diabetes Prevalence in United States

- 150% higher in Hispanic males vs. non-Hispanic white males
- 200% higher in Mexican Descent males vs. White males

MMWR Domínez et al., 2015
Why is it important to engage Hispanic men?

Hispanic men compared to white males and women:

- Higher obesity and total high cholesterol
- Delayed medical care
- Higher hospitalization and length of stay rates
- Less diabetes knowledge
- Less likely to visit a diabetes specialist
- More likely to face diabetes-related complications.
- Contribute to high US $$ medical cost
- Among participants in Diabetes Education programs 25% are men 75% are women

Domínguez, 2015; Davis, 2017; Graham 2012; Macnahton, 2008; Vaccaro, 2016, Livingston, 2008, CDC 2019
Why The Diabetes Garage for men in El Paso, TX?

Diabetes Prevalence

- 16.5% - Texas Health Department
- 30% - Medicaid/Medicare beneficiaries have diabetes
- 26% - Ages 18 to 65 are uninsured

- Age adjusted mortality rate in El Paso
  - 27% Females
  - 39% Males
El Paso County Texas

Population
- El Paso County Population = 835,593
- El Paso City Population = 683,080
- 82% Hispanic (Mexican-American)

Education (25 yrs. or more)
- High School or more = 78%
- Bachelor’s degree or more = 28%

Economic Profile
- Median Household Income = $42,000
- 21% persons in poverty
The Diabetes Garage Conceptualization

Knowing your community’s assets

• **El Paso TX Car Culture:**
  – Car enthusiast
  – 60-100 car events each year
  – Over 60 car groups/organization
  – Car events used to gather community together for causes
Car Shows Bring People Together for a Cause

• Fallen Officers Memorial Car Show
  – Southwest University
Car Shows Bring People Together for a Cause

• The University of Texas at El Paso
  – Student Association
Car Shows Bring People Together for a Cause

• El Paso Children’s Hospital Miracle on Wheels Car Show
Car Shows Bring People Together for a Cause

Celebrating Mexican American Culture Car Show
-Lincoln Park Day

The annual celebration of El Paso's "Mexican American culture" will take place on Sunday, September 22 at Lincoln Park, a.k.a. Chicano Park.

Lowriders, Live Music Highlight Lincoln Park Day
Classic cars, art, and culture will be on full display
Car Shows Bring People Together for a Cause

• Father’s Day Out Car Show
  – Basset Place Mall
Car Shows Bring People Together for a Cause

• Human Society Adoptions at Car Shows
Car Shows Bring People Together for a Cause

- St. Marks Catholic Church Car Show
History of Car Culture in Mexican American Communities

• 1960s: Mexican-American culture not represented in mainstream US culture

• Mexican-Americans illustrated own culture & pride through customizing cars with cultural symbols

• “Car culture” brought people together and is viewed as a form of family identification via

  “family project or that their car connects them to their family or community”

(Chappell, B. Aesthetics and Politics of Mexican American Custom Cars. 2012 University of Texas Press)
Examples of Illustrating Pride, Family, Service, and Religion
Examples of Illustrating Pride, Family, Service, and Religion
What is The Diabetes Garage℠

- A tailored diabetes self-management program

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  - to engage men in diabetes education programs
What is The Diabetes Garage℠

The Diabetes Garage Handbook / Curriculum

Workshop 1- Features of your body & diabetes
  Check your gauges (Signs/Symptoms)
  (AADE-Glucose monitoring & Problem solving)

Workshop 2- Mileage by steps - pur all your gears in use (AADE-Being active)
  Full throttle (AADE-Healthy coping)

Workshop 3- Keep your battery charged (AADE-Taking medications)
  Catastrophic Failure (AADE-Complications, Reducing risks)
  Tune-ups/Inspections (AADE-Reducing risks)

Workshop 4- Fuel (AADE-Healthy eating) + Celebratory lunch/graduation with certificate of completion + toolbox gift
What is The Diabetes Garage SM

Diabetes Maintenance Manual/ Curriculum

(AADE 7 self-care behaviors)

- Healthy eating
- Being active
- Glucose monitoring
- Taking medication
- Problem Solving
- Reducing risks
- Healthy coping
Methods

1. Investigate whether men’s diabetes knowledge, intent to engage in preventive self-care, diabetes management behaviors and physical health outcomes improved after participating in The Diabetes Garage™

   a. Pre-post survey and clinical health assessments:
      • Diabetes knowledge: Modified Starr County Diabetes Knowledge Questionnaire
      • Diabetes management self-efficacy (National Diabetes Education Program)
      • Diabetes management behaviors (portion size, carbohydrate counting, physical activity)
      • Physical health outcomes (Glycosylated Hemoglobin A1c, non-Fasting glucose, Blood Pressure, Weight, Waist Circumference)

   b. Analysis: Non-parametric descriptive statistics and pre-post trend observation. Small sample size and lack of normal distribution does not allow for t-test analysis as it increases a chance of false positive statistically significant results. (Winter, 2013)

Pilot Study Recruitment

DG Series 1
Outreach to men with/without diabetes

- Car shows, health fairs, diabetes research studies, worksites
- 23 men recruited
- 10 men scheduled
- 3 men attended
- Mean age = 51.33 years
- 66% retention rate

DG Series 2
Outreach to men with diabetes

- Health fairs, clinics, car shows, diabetes research study
- 10 men scheduled
- 8 men attended
- 6 men completed
- Mean age = 63.86 years
- 75% retention rate

Incentive: Men receive $20 cash and $10 gas card for participating
Pilot Study Recruitment

DG Series 3
Outreach to men with diabetes

- Car shows, health fairs, diabetes research studies, worksites
- 10 men scheduled
- 8 men attended
- 8 men completed
- Mean age = 48.75
- 100% Retention rate

Incentive: Tool box with glucometer and strips

DG Series 4
Bi-directional Health System (Spanish)

- Project VIDA health clinic
- 8 men scheduled
- 4 men attended
- 3 men completed
- Mean age = 47
- 75% Retention rate
Recruitment in Health System Sectors

Bi-Directional Referral Process starting 2020-2023

- Federally Qualified Health Centers
  - Project VIDA – January workshops
  - Centro San Vicente – planned

- Veterans Affairs
  - Diabetes Program

- El Paso Health Insurance
  - Disease Management Unit
Pre Post Assessment Results:
Self Care Behaviors – Days measure food portions
(Paired comparisons)

“Me and my son went to [Omitted place] .... he ordered his steak, they brought the big salad and they brought the big was big,..... “Wait a minute, can you make mine a small portion?” and she did! She brought me a...small plate.... I left that restaurant content, not overstuffed and he had a lot of trouble. He just couldn’t finish it.... And there—so they’re indulging because they learn from us”
Pre Post Assessment Results:
Self Care Behaviors – Count carbohydrate servings
(paired comparisons)

<table>
<thead>
<tr>
<th>Days Count Carbohydrate Portions</th>
<th>Pre Diabetes Garage</th>
<th>Post Diabetes Garage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t know how</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>0 days</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1-3 days</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4 - 7 days</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Participant 1:
“But yeah, you can eat anything just kind of in moderation.”

Participant 2:
“You know, you need something, how to order in restaurants.”

Participant 3:
“So what you learn from this class is that you...learn how to eat...”
**Pre Post Assessment Results:**
**Physical Health – Blood Pressure** (N=13 Paired Sample)
systolic mean diff= 11.23 (sd, 13.04) p-value = .009
diastolic mean diff= 9.84 (sd, 27.11), p-value = .215

Blood Pressure in mmHG

Optimal BP 120/80 mmHg
Pre Post Assessment Results:
Physical Health – Weight
(N=14  Paired Sample, mean diff =2.53 (sd 5.94) p=.135)

Weight in Lbs.

“...The last four weeks since I started here, I lost 14lbs. just changing what I eat.”
Pre Post Assessment Results:
Physical Health – Glycosylated Hemoglobin A1c (N=18)

Not statistically significant
The Diabetes Garage Concept

• “The car, the garage was a good hook for me”. “Typically men, ....take pride in what they drive ...it’s a good catch point.”

• “One of the reasons I’m here is that I saw that toolbox. That’s what really attracted me to come to class, the toolbox”

• “I mean I know I’m mechanically inclined and just comparing—made a lot of sense, it’s tremendous. I really enjoyed it, I really enjoyed it. I would do it all over again.”

• “Just the fact of, changing from you know learning diabetes to the comparisons, to engines and so forth. ”
The Diabetes Garage Concept

Focus Group:
“... I think,.... if you, just concentrated on one area like, the basic of diabetes and that’s all you talk about you’re gonna get a bunch of people that really not going to listen. ..... But if you intertwine with, ok, this is how it affects the car and this is how your body runs and so forth and so on, then it provided...more of an interest for me! To not only know about diabetes but to also know about cars too.”

Evaluation Feedback:
Before this class I was lost, did not understand anything about diabetes. Now I have an understanding and I have a sense of peace that I can control it and I will. Thank you
Conclusion

1. The Diabetes GarageSM shows the potential to engage men in diabetes self-care if culturally tailored.

2. The Diabetes GarageSM shows the potential to improve men’s self-care behaviors and physical health outcomes.
Limitations and Strengths

Limitations

1. Small sample size does not allow assessing accurate impact of The Diabetes Garage™ or generalizability

2. Convenience sample and selection bias may exist where men who more apt to attend classes participated in The Diabetes Garage™.

Strengths

1. Quantitative and qualitative data collected

2. Valuable lessons learned via pilot studies
Thank you!

Questions?

Visit us at: www.diabetesgarage.org

Connect with us at @TheDiabetesGarage
Illinois

Strengthening State Systems to Improve Diabetes Management Outcomes

Presenters: Meghan Bertolino, Public Health Educator
Courtney Michel, Diabetes Program Manager
Burden of Diabetes in Illinois

- The number of adults between the ages of 18-64 diagnosed with diabetes has more than doubled in the past 15 years, reaching approximately 1,028,608 in 2016.

- This represents 10.4% of the adult population and was the seventh leading cause of death.\textsuperscript{1,4}

- Approximately 3.6 million adults have prediabetes.\textsuperscript{2}

- Without intervention, 15% - 30% of people with prediabetes will develop Type 2 diabetes within 5 years.\textsuperscript{3}

\textsuperscript{1} IL BRFSS (2016), \url{http://www.idph.state.il.us/brfss/statdata.asp?selTopic=diabetes&area=il&yr=2016&strata=state&show=freq}


\textsuperscript{3} \url{https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf}

\textsuperscript{4} \url{http://www.dph.illinois.gov/sites/default/files/publications/leading-causes-death-2016-022318.pdf}
Pilot Project Objectives

• Systematic Approaches to Screen/Test/Refer

  Develop and implement a systematic, place-based approach for diabetes prevention and management for patients with or at risk for pre-diabetes.

• Innovation Strategy: Managed Care Organization

  Offer the National Diabetes Prevention Program (DPP) as a covered benefit for Illinois Medicaid recipients.
Screen/Test/Refer Pilot Project

• Identify health system in southern Illinois counties.
• Develop and implement systematic approaches to screen, test, and refer patients with or at risk for developing prediabetes.
• Develop processes/systems and pilot test implementation for screening, testing and referral.
• Convene additional local partners to share successes and lessons learned.
Screen/Test/Refer Pilot Project

• Strengths
  ➢ Partnership with Gateway Regional Youth Christian Association (YMCA) and Madison County Health Department
  ➢ Success of Gateway YMCA DPP Program
  ➢ Senior Healthy Living Days event - October 2019

• Barriers
  ➢ It takes time to change policy.
  ➢ Lack of physician engagement, “buy-in”
  ➢ Strict health care system solicitation policy
Innovation Strategy: Managed Care Organization Pilot Project

• Conduct an environmental scan.
• Develop a written report and oral presentation that includes an overview of the Medicaid landscape.
• Share the Medicaid DPP summary report with the Illinois Medicaid Managed Care Organization (MCO) Project for the reimbursement of the National DPP program.
Managed Care Organization Pilot Project

• Strengths
  ➢ June 2019 MCO meeting with summary report
  ➢ 6/18 Initiative - November 2019 - December 2020

• Barriers
  ➢ Delay in relationship with state Medicaid agency
  ➢ Establishing provider types
Key Takeaways

• Collaboration with stakeholders is essential to policy change.
• Policy change takes time.
• Be persistent - If at first you don’t succeed, try again.
• Continue to strengthen and identify new partners.
Questions?

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Thank you!
Diabetes Prevention in Rhode Island Health Equity Zones

March 3, 2020
• Health Equity Zone (HEZ) overview
• Diabetes prevention with HEZ Cohort 1
• Lessons learned from Cohort 1
• Current diabetes prevention efforts in HEZ
• Future efforts in HEZ
HEZ Theory of Change

• **IF** Rhode Island collaboratively invests in defined geographic areas to develop sustainable infrastructure, and aligns a diverse set of resources to support community-identified needs…

• **THEN** we will positively impact the socioeconomic and environmental conditions driving disparities and improve health outcomes.

The development of sustainable community infrastructure working to improve the community from within + The alignment of resources to create sustained investments in the community to address the needs identified by the community = Will lead to positive impacts on the social and environmental determinants of health and improved population health outcomes
Confirm Geographic Location → Build a Collaborative → Assess Community Needs and Assets → Prioritize Needs → Develop an Action Plan

Community Engagement
Moving to Systems Change

- Investments must be made at all levels
- Small policy changes lead to large upstream impacts
- Approach must be multi-sectoral
Current Status – Cohort 2

- Currently 10 HEZ. 7 HEZ have continued from the initial contract and we have brought on 3 new HEZ.
- All 10 HEZ are in the process of updating their community needs assessments or conducting a new needs/asset assessment for their community.
- Action plans are due to be finalized in July 2020.
- HEZ collaboratives are becoming more comprehensive and responsive to the needs of their community.
Diabetes Prevention Program in RI

DPP Partnership Landscape

Coverage
Healthcare Organizations
Community-Based Programs

Contributing Partners/DPP Stakeholder Network
• Between 2013-2018, RIDOH received CDC braided funding to prevent and control diabetes, heart disease, obesity and stroke.
• During this time, the infrastructure for the National DPP in RI was built.
• Simultaneously, the HEZ initiative was built and a driver in these efforts.
Beginning in 2016, 7 organizations in 7 HEZs representing the following sectors became **CDC-Recognized Lifestyle Change Programs** and began to implement the National DPP in RI:

- Community-Based Organizations
- Healthcare Organizations
- Municipality
- Senior Center
• DPP organizations were not funded directly by RIDOH, but received funding through the HEZ backbone organizations.

• RIDOH hired **4 HEZ Community Liaisons** to support DPP implementation on behalf of these communities.

• **HEZ Community Liaison** tasks included:
  • marketing
  • outreach
  • recruitment
  • setup of DPP classes,
  • CDC data submission assistance
  • quality improvement
Current Efforts in HEZ

• Working with 4 of 7 Cohort 1 DPP organizations with CDC (1815 & 1817) funding located 3 of the HEZs.
• Working with 3 new organizations located in 3 HEZs.
• Contracting directly with organizations.
• Focusing on Healthcare Organizations (HCOs).
  • Large healthcare system is offering DPP as a wellness benefit to their employees
• Broadening the DPP Stakeholder Network membership.
• Offering other programs in HEZ, such as chronic disease self-management and diabetes self-management.
Future Diabetes Prevention Efforts in HEZ

• Value-based payment model.
  • Pay-for-performance based on attendance and retention

• Collaboration with RI Business Group on Health.
  • Exploring creation of a toolkit to market DPP to employers

• Targeting businesses in HEZ that employ at-risk populations.
  • Second-largest healthcare system in state
  • Largest commercial insurer in state
  • City of Providence, the largest city and state capital
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State Q&A
Healthy People 2030: Promoting Innovation in Diabetes Prevention

Kelsey Donnellan, MPH
Senior Analyst, Health Improvement, ASTHO
Overview

1. Framework for Healthy People 2030
2. Important updates: objective types & cross-cutting topics
3. Discuss ways to promote innovation
Quick Poll

When was the first decade of Healthy People?
A. 1970
B. 1990
C. 2000
D. 2020
Where it All Started

• **1979 Surgeon General’s Report**

• Healthy People 1990 outlined a plan of action for the U.S.

• Healthy People 1990 included 226 specific, measurable health objectives
Healthy People 2030

Vision
A society in which all people can achieve their full potential for health and well-being across the lifespan.

Mission
To promote, strengthen and evaluate the Nation’s efforts to improve the health and well-being of all people.
New to Healthy People 2030

Core objectives = high national importance + available data + evidence-based interventions

Developmental objectives = high priority issues + evidence-based interventions
[missing: available data]

Research objectives = high health or economic burden or substantial disparity between populations
[missing: available data + evidence-based interventions]
Promoting Innovation

Diabetes Developmental Objective
Increase the proportion of eligible individuals completing CDC-recognized lifestyle change programs.
ASTHO Resources

• Visit ASTHO’s e-Learning Center
  • Infographic about the objective types and
  • ASTHOConnects: Healthy People 2020 and 2030 Conversation and Cup of Joe
• Request individualized and on-demand assistance from any of our teams
Additional Resources

HealthyPeople.gov
@HealthGov

Launching March 31, 2020
1:00 to 3:00pm ET
Livestream will be available soon
Help ASTHO evaluate ASTHOConnects Innovative State Strategies for Diabetes Prevention by visiting http://astho.az1.qualtrics.com/jfe/form/SV_5dnt9oEC0nghws5 on your device now!