Effects of Patient Navigation on Chronic Disease Self Management

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PRESENTATION OBJECTIVES

• Specify the contextual environment for the Patient Navigator (PN) program

• Discuss the conceptual framework for the PN program

• Describe the infrastructure of the PN program

• Explain the outcomes of the PN program
THE LARRY COMBEST COMMUNITY HEALTH AND WELLNESS CENTER
This Center is funded by the Bureau of Primary Health Care, Health Resources and Services Administration of the US Department of Health and Human Services
THE LARRY COMBEST CENTER

• Established in 1988 to provide TTUHSC student health services

• Changed focus to provide primary care services to underserved populations in East Lubbock in 1998

• A Nurse-managed FQHC that is a public entity

• Co-Applicant Governing Board – Combest Health and Wellness Center Community Alliance (CHWCCA)

• TTUHSC acts as fiscal unit

• Administered by the School of Nursing for TTUHSC

• All employees are hired by the SON
OUR THREE MAIN PROGRAMS.

- Primary Care for children and adults
- Senior House Calls
- Diabetes Education Center

“Increase access to Healthcare, Employ Communities”
Primary Care Clinic

- Adult and Children
- Sick and well visits
- Physicals for all ages
- Immunizations
- Minor injuries

- Chronic Disease Management Programs
- Onsite Laboratory
- Prescription Assistance
- Nutritional Education
- Case Management
- Counseling
Senior House Calls

• Provide unique primary care to patients in their own home

• Our FNP’s can be designated as a patient’s primary care provider

• Treat and manage both acute and chronic illness

• Coordinate care between families, community, social services, and home health/hospice management
Diabetes Education Center

• The only certified program in Lubbock
• Registered Dietician and Bilingual RN
• One on one education
• Group classes
• Support groups
• Home visits
THREE ADDITIONAL PROGRAMS. . . .

- Nurse Family Partnership
- Patient Navigator
- Stork’s Nest

“Increase access to Healthcare, Employ Communities”
TRANSFORMACION PARA SALUD: PATIENT NAVIGATOR PROGRAM

This program is funded by the Bureau of Health Professions, Health Resources and Services Administration of the US Department of Health and Human Services
Organization based on the Clinical Services and Community Engagement Program of the ATP School of Nursing, TTUHSC

Vulnerable clients of the Larry Combest Community Health and Wellness Center who live primarily in Lubbock county

Transformation for Health conceptual framework developed by Dr. Christina Esperat, et al, used as the foundation
An approach is needed to help patients change or adopt healthy behaviors – by themselves, not for them by others.
Transformational process: a multilevel approach
LOGIC MODEL FOR TRANSFORMATION FOR HEALTH FRAMEWORK APPLICATION

**CONSTRUCTS**

- Cognition
  - Critical Consciousness

- Intention
  - Self-efficacy, Social Support

- Decision
  - Barriers and Facilitators
  - Goal Setting

- Transformation
  - Self-Guided Evaluations
  - Modification of Goals

**IMPLEMENTATION**

- Motivational Interviewing
  - Self-Efficacy Enhancement
    - Identification of Social Support
    - Promotion of Effective Use of Social Support
    - Assistance in Goal Setting: Identify Barriers and Facilitators
    - Facilitation of Evaluation of Outcomes
    - Guidance in Modification of Goals if Outcomes Not Met

**OUTCOMES**

- Apprehension of Clients’ Realities and Readiness to Change
  - Enhanced Self Efficacy for Health Behaviors Change
  - Intention to Adopt Positive Health Behaviors
  - Effective Use of Social Support in Health Behavior Change
  - Realistic Goal Setting for Health Behavior Change
  - Maintenance of Goals
  - Continued Positive Health Behaviors

**DISTAL END POINTS:** Targeted biomarker goals met for specific Chronic Disease Management Programs, hospital and Emergency Room admissions
• Improve health care outcomes for vulnerable individuals in Lubbock County using certified community health workers as patient navigators.
Three year funding from the Bureau of Health Professions

Personnel hired:
0.75 FTE Program Coordinator
1.0 FTE Clerical Specialist
4.0 FTE Community Health Workers
## Target population

<table>
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<tr>
<th>Race/Ethnicity</th>
<th>Hispanic</th>
<th>Non-Hispanic</th>
<th>Gender and Age</th>
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<tbody>
<tr>
<td>Asian</td>
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<td>.5%</td>
<td>Male</td>
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<tr>
<td>Black</td>
<td>3.5%</td>
<td>11%</td>
<td>Female</td>
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<tr>
<td>White</td>
<td>22%</td>
<td>24%</td>
<td>&lt;20 years</td>
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<td>&gt; 1 Race</td>
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<td>1%</td>
<td>20-64 years</td>
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<tr>
<td>Unreported</td>
<td>38%</td>
<td>0%</td>
<td>65 and over</td>
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<tr>
<td>Total</td>
<td>63.5%</td>
<td>36.5%</td>
<td>Total</td>
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- Total Male: 39%  
- Total Female: 61%
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<tr>
<th>Income by FPL</th>
<th>Chronic Disease Pts</th>
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<tr>
<td>100% and below</td>
<td>59%</td>
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<tr>
<td>101-150%</td>
<td>10%</td>
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<tr>
<td>151-200%</td>
<td>4%</td>
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<td>Over 200%</td>
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<tr>
<td>Unknown</td>
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<td>Diabetes</td>
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<tr>
<td>Asthma</td>
<td>153</td>
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<tr>
<td>Hypertension</td>
<td>435</td>
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</table>
Conditions Navigated

- Diabetes
- Hypertension
- Asthma
- CHF
- Co-morbidities
  - Depression
  - Obesity
Challenges to Navigated Community

- Low socio-economic status
- Low health literacy
- Co-morbidities
- Inadequate resources
- Transportation
- External locus of control
Navigator Recruitment & Training

- TTUHSC SON certified institution by Texas Department of State Health Services
- Cadre of certified promotoras or Community Health Workers
- Recruitment through West Texas CHW network
- 160 hour core training
- 6 week intermediate training
Method of Navigation

• Home Visitation Method

• Three methods of client recruitment implementing established protocols using a warm hand-off between clinic staff and navigator.
  
  • Clinic referrals from clinic staff
  
  • Data coordinator checks daily visit schedule (EMR)
  
  • Navigator present at clinic during busy walk-in days
Patient Encounters & Typical Interventions

- Patient encounters
  - Occur in the home
  - Community Center
  - Work-site
  - Clinic
  - Other

- Typical Interventions
  - Based on information collected from survey tools such as social and behavioral determinants
  - Education-Identified through weekly goal sheets
  - Accessing identified resources
Supervision and Ongoing Training

Supervision
- Project Coordinator
  - Reflective Supervision
  - Weekly Team Meetings
  - One-on-one meetings
  - Home visits with navigator-patient survey
  - Performance Improvement monitors
  - Monthly reports to BOD

Ongoing Training
- Areas identified during reflective supervision meetings and through weekly team meetings
- Community partners invited to team meetings
- Schedule flexibility to attend other trainings offered in community
Department & Community Partners

Department
- Interdisciplinary Team established to meet monthly consisting of
  - NPs
  - Nurses
  - MA
  - Receptionist staff
  - DM Educator
  - Behavioral Therapist
  - PAP coordinator
  - Billing staff

Community
- Strong relationships previously established through a community coalition- ELCCHI
- Most have the same interest in helping the community
- Built on face to face meetings and mutual give and take approach
Lessons Learned

- Fortunate to be part of the previous demonstration project
- Established CHW program with excellent training & preparation
- Weekly goals must be established with patients.
- Patient’s commitment level important
- Monthly review of data and outcomes necessary
- Accountability is a must
- Interdisciplinary team has been a jewel
EVALUATIONS OF OUTCOMES FROM THE DEMONSTRATION PHASE

BIOLOGIC AND BEHAVIORAL INDICATORS
HbA1c levels obtained upon enrollment into the program were averaged for 99 patients identified with diabetes and who had a pre and post HbA1c reading: from a baseline of 9.3%, a reduction to an average of 8.4% was noted post-navigation (statistically significant).

81 patients were assessed for changes to blood pressure readings prior and post navigation with significant differences noted.

68 patients navigated had BMI readings average of 34 pre and post navigation without changes.
Cholesterol, triglycerides, LDL and HDL pre and post showed a slight reduction in Cholesterol, from 178mg/dl to 172.3mg/dl.

These clinical outcomes showed that the project was moderately successful in obtaining improved results on the biomarkers for the chronic diseases targeted.
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<th>Variable Name</th>
<th>Group Mean of Time 1 ±SD</th>
<th>Group Mean of Time 2 ±SD</th>
<th>The mean of Difference (Time1-Time2)</th>
<th>95% CI of Difference</th>
<th>t-value</th>
<th>p-value</th>
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<td>8.40±1.36</td>
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<td>-3.98</td>
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<td>Social Provisions Scale Form</td>
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<td>Opportunity for Nurturance</td>
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<td>Summary of Diabetes Self Care Activities Form</td>
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