Sustaining an Innovative Triple Aim Model of NP-Led Care across Six Clinics: Head Start Sites, High School, College Health, Employee Health & Refugee Populations

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University of Texas Health Science Center San Antonio School of Nursing
Professor and Vice Dean, Practice and Engagement
Executive Director, UT Nursing Clinical Enterprise,
Student Health Center, Employee Health and Wellness Clinic,
AVANCE and Healy-Murphy Wellness Clinics
Director, Campus Wellness Activities
Professor, Department of Pediatrics, UTHSCSA School of Medicine
• With the 2011 Future of Nursing and 2015 Code Red recommendation to allow APRNs to practice to the full extent of their education and training and with multiple states removing restrictive language, the opportunity for Nurse Practitioners and other APRNs to step up and lead has never been more critical or relevant.
Over the past 6 years, the UT Nursing Clinical Enterprise (UTNCE) has developed, implemented, evaluated and sustained an innovative nurse-led model of care with high patient satisfaction scores and positive clinical outcomes at one-third the cost of traditional medical models.
Nurse-Led Clinics

• This sustainable nurse-led Triple Aim model provides an accessible, cost-effective, efficient, high quality system of care.

• Each clinic was developed based upon community request, focus groups, a local needs assessment, environmental scanning, and determining potential for long-term sustainability.
UTNCE Clinics:

UTHSCSA – Student Health Center

UTHSCSA - Employee Health & Wellness Clinic

AVANCE San Antonio – Early Head Start (Birth to Three) Castroville Rd.

AVANCE San Antonio-Head Start (Three to Five) Fenley Center

Healy-Murphy Wellness Center – Alterative High School with Day Care Center on-site and Head Start conversion

San Antonio Refugee Health Clinic- St. Francis Episcopal Church

Evening Pediatric Clinic for children of students (January 2016)
• The sustainability model integrates research/discovery, teaching/learning, practice/engagement and policy to enhance the well-being of the local to global community. The model provides care in six clinics for more than 14,000 patients across the lifespan.
Sustainability: Building a Mosaic of Support

Integrated Model of Sustainability

- Effective, Thoughtful and Positive Communication
- Creative Community Partnerships
- High Quality, Collaborative, Team Relationships
- Federal, State and Foundation Grants/Contracts
- Clear Business Plan/Faculty Practice Plan
- Medicare and Medicaid Funding
- Administrative Support
- Patient Revenues/Private Insurance
- Financial Resources
- Private Donors/Development
- Local Fundraisers

Novak, 2004; 2014
• This integrated model of sustainability uniquely positions nurses to further change the face of healthcare and achieve the IOM Future of Nursing recommendations, including removal of practice and policy barriers.

• The UT Nursing Clinical Enterprise Mission seeks to remove health disparities and promote social justice consistent with a systems approach and Triple Aim goals of increasing access to high quality, patient-centered, cost-effective care.
• Behavioral/mental health services have been integrated, strengthening the comprehensive primary care delivered at these six sites.

• Health promotion, disease prevention, client, family, and community education, self-care emphasis, acute illness care, and management of chronic conditions are provided by the UT Nursing Clinical Enterprise APRNs (PNP, FNP, PMHNP), 2 registered dieticians, an audiologist, 3 collaborating physicians per Texas state law, and undergraduate/graduate interprofessional students (nursing, medicine, dentistry, audiology, PA, PT).
• A federal grant provided $300,000 to fund the EPIC electronic health record (EHR) system to link the clinics.

• Engineering principles (patient flow, human safety factors, simulation, and LEAN Six Sigma), Institute for Healthcare Improvement (IHI) Triple Aim, and optimal use of technology, including customized EPIC EHR are applied for accessibility, efficiency, and effectiveness.
Doing Primary Care Differently: Nurse-Managed Clinics

- CMS DSRIP Innovation Project: $5.01 million over 5 years

- Partner with three DSRIP Projects within the School of Nursing – Nurse-managed clinics, Teleaudiology and TeamSTEPPS: The whole is greater than the sum of its parts.

- Expand a replicable, accessible, high quality, innovative, sustainable, cost effective model of Nurse-led care – reflects *Triple Aim*: Improve the patient experience of care (including quality and satisfaction); improve the health of our populations; and reduce the per capita cost of health care – integrates TeamSTEPPS.
UT Health Science Center School of Nursing receives $600,000 Hillman Foundation Innovations in Care grant

Funding will expand health care for children and families in need

SAN ANTONIO (Nov. 6, 2014) — Thousands of children — and now their siblings and parents — will have access to preventive and primary health care at two clinics on San Antonio’s West Side and one clinic in Uvalde, thanks to a $600,000 grant from the Rita & Alex Hillman Foundation. The three-year Hillman Innovations in Care Program grant was awarded Nov. 3 to Dr. Julie Novak and the UT Nursing Clinical Enterprise practice of the School of Nursing, part of the UT Health Science Center San Antonio. The initiative was created by the Hillman Foundation to enhance and expand nurse-driven programs that care for vulnerable populations.

Two grants awarded in the nation
The foundation’s six-person review committee selected only two projects in the U.S. from more than 260 submitted — the UT Health Science Center vulnerable chidbearing family project and the Michigan State University College of Nursing elder care project. The Health Science Center project is led by Julie Cowan Novak, D.N.Sc., RN, CPNP, FAANP, FAAN, Vice Dean of the School of Nursing and Executive Director of the UT Nursing Clinical Enterprise. Dr. Novak and AVANCE Executive Director Becky Cervantez have been laying the foundation for this project since Dr. Novak’s recruitment to the School of Nursing in 2009.
Dr. Julie Novak, Vice Dean & Executive Director
Priti Doshi, MSN, FNP-C, Lead FNP
Dr. Laurie Wybenga, DNP, MSN, FNP-BC
Dr. Heidi Worabo, DNP, RN, FNP-BC
Dr. Gail Williams, RN, PhD, PMHCNS-BC
Dr. Mark Soucy, PhD, APRN-BC
Dr. Sue Cunningham, Registered Dietician
Dr. Mark Nadeau, MD., FAAFP-Collaborating MD
Carissa Trevino, Immunization Program BSN, RN
Leeann Castillo, LVN
Patrick Kinnamon, LVN
Linda Hernandez, MA, Front Desk SHC
Yvonne Bustos, MA
Rebecca Fernandez, MA
Michelle Southwell, Project Coordinator
Ling Mason, Business Administrator
Heather Wesling, Administrative Assistant-Sr.
3,227 Health Science Center (HSC) graduate students, a designated medically underserved population with 50% from underrepresented groups who are eligible for federal programs.
Student Health Center
Top 10 Presenting Concerns/ Diagnoses

1. Upper Respiratory Infection (sore throat, cold, sinusitis)
2. Behavioral Health concerns
3. Well Woman Exam
4. STD Testing
5. Urinary Tract Infection
6. Allergies/Asthma
7. Gastrointestinal Symptoms
8. Immunizations and Titers
9. Needlesticks/Cadaver lab lacerations
10. Lower respiratory Infections
Employee Health & Wellness Clinic

• 6,000 UT Health Science Center San Antonio (UTHSCSA) employees. Opened in November 2010 by the UTNCE team.

• Provides comprehensive health and wellness services, acute care, and chronic disease management.

• Offers monthly health promotion/wellness and disease prevention themes such as heart health, smoking cessation, weight and stress management and Healthy Eating and Activity Together (HEAT©)
UTHSCSA Employee Health and Wellness Clinic

Top 10 Presenting Concerns/ Diagnoses

1. Upper Respiratory Infection (sore throat, cold, sinusitis)
2. Behavioral Health concerns
3. Well Woman Exam
4. Nasal Allergies
5. Hypertension/Cardiovascular Disease
6. Diabetes
7. Hypothyroidism
8. Hypercholesterolemia
9. Needlesticks
10. Other work site injuries, including monkey bites
• The UTNCE Community-based Clinics serve Pediatric and adolescent populations: 2,000 children enrolled in Early Head Start and Head Start (AVANCE) and Healy-Murphy alternative high school clinic.

• Access to safe, high-quality, affordable health care.

• AVANCE and Healy-Murphy are located in the heart of the low-income neighborhoods they serve.
Healy-Murphy Wellness Center Team

Julie Cowan Novak, DNSc, RN, MA, CPNP, FAANP, FAAN

Rollie Rockett, MSN, CPNP

Christiane Meireles, PhD, RD

Lisa Cleveland, PhD, CPNP

Sue Cunningham, PhD, RD/LD, CDE
• Healy-Murphy Center - Alternative high school where 50% of the students are pregnant or parenting.
• On-site daycare and primary healthcare provided for Healy-Murphy children, 50% of whom are Head Start enrollees.
• Expanded services include an increase in service delivery from one-half day per week to five days per week for children and teens.
AVANCE Head Start/Early Head Start and Parent Care Clinic Team

Kathryn Parke, DNP, APRN, CPNP

Johanna Matos, CPNP, MSN, RN, BSN

Laurie Wybenga, DNP, FNP-C

Julie Cowan Novak, DNSc, RN, MA, CPNP, FAANP, FAAN

Christiane Meireles, PhD, RD

Salina Pierce, BSN RN Coordinator

Josie Alfrido, LVN

WE MAKE LIVES BETTER
UT HEALTH SCIENCE CENTER
SAN ANTONIO
AVANCE Head Start/Early Head Start

- AVANCE houses the Head Start/Early Head Start programs.
- There are currently two clinic sites in San Antonio.
- Expanded services include an increase in service delivery from one-half day per week to five days per week.
San Antonio Refugee Health Clinic (SARHC)

Located in the heart of its refugee population at St. Francis Episcopal Church

Over 1,000 refugees and their families assigned to San Antonio annually

500 seek health care and health education in the clinic and nearby housing

Team:

Dr. Julie Novak, School of Nursing Liaison
Dr. Ruth Grubesic, Consultant
Interprofessional HSC Faculty and Students representing UTHSCSA:
Nursing, Medical, Dental, and PA students

5 Translators - Nepali, Arabic, Swahili, French and Burmese

Referrals include: AVANCE, DSRIP Projects (Teleaudiology, Evening Pediatric Clinic [January 2016]), CARELINK assistance; UIW eye clinic, Planned Parenthood, The Center for Refugee Services, UHS ER and ExpressMed, Any Baby Can, UHS Diabetic clinic and Catholic Charities for Case Management.
Clinic #7 - New rural partnership launched with AVANCE Head Start in Uvalde, Texas (70 miles West of San Antonio) on August 13, 2015. Back to School Texas Health Steps (EPSDT) for 26 children/50% needing referral, e.g., significantly elevated lead levels.

Interprofessional Service-Learning

• Community clinic projects serve as sites for faculty practice, community-based research; public health, Leadership, Capstone and nurse practitioner preceptorships, and interprofessional service learning projects.

2014 - 2015

• Nursing Faculty, 21; Nursing Students, 81
• Medical Faculty, 3; Medical Students, 59
• Dental Faculty, 1; Dental Students, 37
• Audiology Faculty, 4; Audiology Students, 20
• Total Faculty: 29
• Total Students: 197
Research Opportunities: Outcome Measures

• Evidence-based, Value-driven Care Cost - 20% operating margin achieved
• Patient Safety & Quality of Care - TeamSTEPPS, CQI, AAAHC Accreditation
• EHR Optimal Use - Data Analytics Customization
• Healthy Eating Activity Together (HEAT©) - 50 Enrolled in UT Fitness Challenge
• Interprofessional Collaboration - Increase 1MD to 3MDs, 1 audiologist, 1 nutritionist, 1 exercise physiologist and 2 dentists
• Developmental Outcomes – Texas Health Steps Data
Research Opportunities: Outcome Measures

• Immunization Rates 100% - SHC and AVANCE
• New Hire and Existing Employee - Immunization Program Launch
• Patient Flow/Wait times - 1 hour reduced to 10 minutes
• ER Diversion - 6/month reduced to 3/month
• Referral for Hospitalization - 4/month reduced to 2/month
• Patient Satisfaction - 90-95% satisfied to very satisfied, Survey Monkey very good to excellent
### UT Nursing Clinical Enterprise Income Statement

**Dr. Julie Cowan Novak, Vice Dean of Practice and Engagement**

**UT Nursing Clinical Enterprise-N1000 Roll-Up-All Funds**

(As of June 30, 2015)

<table>
<thead>
<tr>
<th>Operating Revenues:</th>
<th>Actual FY15</th>
<th>Actual FY14</th>
<th>Variance $</th>
<th>Variance %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Patient Revenues-SHC/EHWC</td>
<td>293,572</td>
<td>253,814</td>
<td>39,758</td>
<td>15.7%</td>
</tr>
<tr>
<td>Contractual Revenues-University Health System</td>
<td>204,613</td>
<td>176,850</td>
<td>27,763</td>
<td>15.7%</td>
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<tr>
<td>Contractual Revenues-Clarity Child Guidance Center</td>
<td>84,480</td>
<td>84,480</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Contractual Revenues-AVANCE/Healy-Murphy</td>
<td>24,090</td>
<td>32,620</td>
<td>(8,530)</td>
<td>-26.1%</td>
</tr>
<tr>
<td>Private Grant-Hillman Foundation</td>
<td>45,885</td>
<td>45,885</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Federal/State 1115 Waiver-DSRIP Funding</td>
<td>632,601</td>
<td>491,428</td>
<td>141,173</td>
<td>28.7%</td>
</tr>
<tr>
<td>Other Operating Revenues - InterDepartmental Services</td>
<td>136,823</td>
<td>65,012</td>
<td>71,811</td>
<td>110.5%</td>
</tr>
<tr>
<td><strong>Total Operating Revenues</strong></td>
<td><strong>1,422,064</strong></td>
<td><strong>1,019,724</strong></td>
<td><strong>402,340</strong></td>
<td><strong>39.5%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operating Expenses:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty and TA Salaries</td>
<td>397,498</td>
<td>300,951</td>
<td>96,547</td>
<td>32.1%</td>
</tr>
<tr>
<td>Staff Salaries</td>
<td>587,102</td>
<td>494,835</td>
<td>92,267</td>
<td>18.6%</td>
</tr>
<tr>
<td>Benefits</td>
<td>235,084</td>
<td>198,978</td>
<td>36,106</td>
<td>18.1%</td>
</tr>
<tr>
<td>Maintenance and Operations</td>
<td>329,632</td>
<td>146,591</td>
<td>183,041</td>
<td>124.9%</td>
</tr>
<tr>
<td>Travel</td>
<td>5,968</td>
<td>3,359</td>
<td>2,609</td>
<td>1,562.4%</td>
</tr>
<tr>
<td>Official Functions</td>
<td>27,541</td>
<td>14,561</td>
<td>12,980</td>
<td>89.1%</td>
</tr>
<tr>
<td>Other Operating Expenses</td>
<td>26,265</td>
<td>23,655</td>
<td>2,610</td>
<td>11.0%</td>
</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
<td><strong>1,609,090</strong></td>
<td><strong>1,179,931</strong></td>
<td><strong>429,160</strong></td>
<td><strong>36.4%</strong></td>
</tr>
</tbody>
</table>

| Operating Income (Loss)           | (187,026)   | (160,207)   | (26,820)    | -16.7%     |
| Investment Income                 | -           | -           | -           | -          |
| Gift Contributions                | -           | -           | -           | -          |
| State Appropriation               | 2,328       | 2,375       | -           | -          |
| **Adjusted Income (Loss)**        | **(184,698)** | **(157,832)** | **(26,867)** | **-17.0%** |
| Adjusted Income (Loss) %          | -13.0%      | -15.5%      | -           | -          |

| Other:                            |            |            |            |            |
| Transfers In: Student Fees        | 341,198     | 314,800     | 26,398      | 8.4%       |
| Transfers In: Needlstick          | 5,000       | 5,000       | 0           | 0.0%       |
| Transfers In: UT System Tobacco Fund | 48,068 | 34,745 | 13,324 | 38.3% |
| Transfers In: President Wellness Fund | 100,000 | 100,000 | 0 | 0% |
| Transfers Out                     | (2,519)     | (2,519)     | 0           | 0.0%       |
| Transfers In: Other               | 1,500       | 318,206     | (316,706)   | -100.0%    |
| Capital Outlay                    | -           | -           | -           | -          |
| **Total Other**                   | **493,247** | **772,751** | **(279,504)** | **-36.2%** |

| Change In Net Position            | 308,549     | 614,919     | (306,370)   | -49.8%     |

| Beginning Net Position            | 824,255     | (35,930)    | 860,185     | 2394.1%    |
| Beginning Net Position - As Restated | -           | -           | -           | -          |

| Ending Net Position               | **1,132,804** | **578,989** | **553,815** | **95.7%** |
Conclusions

• The nurse-led model can be accomplished at 30% to 50% of the cost of a traditional medical model.

• The nurse-led clinics encompass the *Triple Aim* objectives: improving the student/patient experience of care (including quality and satisfaction); improving the health of our populations; and reducing the per capita cost of health care.

• This model of health care delivery and evaluation provides early evidence of an accessible, safe, patient and family-centered, cost-effective, and efficient system of care by Family, Pediatric, and Behavioral Health Advanced Practice Nurses.
Conclusions

The DSRIP project supports significant expansion at each of the clinical sites: Over 500 refugees, 2,000 children enrolled in Head Start and day care centers and their parents; 3,300 Health Science Center Students (a designated Medically Underserved Population), and 6,000 employees (60% from underrepresented groups). Provides an integrated model of research/discovery, teaching/learning and practice/engagement. The patient population has grown from 2,500 to 14,000. There will be 20,000 patient visits by December 2015.

Assessment, triage, critical analysis, health promotion, disease prevention; client, family, and community education; self-care emphasis, acute illness care; and management of chronic conditions can be provided effectively by the School of Nursing Advanced Practice/NP faculty, undergraduate/graduate students, and interprofessional partners.
Acknowledgements

Centers for Medicare and Medicaid Services (CMS) $5.01M Delivery System Reform Incentive Payment (DSRIP) project, 5 years.

“Thinking about Primary Care Differently” - Primary Care Project - 085144601.1.9; UT Nursing Clinical Enterprise (UTNCE): Student Health Center, Employee Health and Wellness Clinic, Practice, and Pediatric Community Projects AVANCE and Healy-Murphy (Regional Healthcare Partnership, Region 6 – DSRIP Summit)
Acknowledgements

“The Rita and Alex Hillman Foundation is one of the nation’s leading philanthropies dedicated to improving lives through nursing-driven innovation.”

$600,000, three-year grant
References


San Antonio’s Riverwalk