Dr. Julie Novak: Nurse-Managed Clinics

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Nurse-Managed Clinics: Improving Access, Expanding Clinical Sites, Optimizing EHR Use and Ensuring Sustainability

Julie Cowan Novak, DNSc, RN, MA, CFNP, FAANP
University of Texas Health Science Center San Antonio School of Nursing
Professor and Vice Dean, Practice and Engagement
Executive Director, UT Nursing Clinical Enterprise

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UT Nursing Clinical Enterprise Mission: Consistent With Systems Approach
Health Home Model

• Integrate research/discovery, teaching/learning, and practice/engagement and policy to enhance the well-being of the local to global community.
• Emphasize best practice and education that is evidence-based.
• Provide excellent learning experiences for our students while serving our community.
• Ensure accessible, continuous, compassionate, coordinated and culturally proficient care.

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The Health Home

• A Health Home is, “A systemic approach to provide comprehensive primary care that facilitates partnerships between individual patients, and their personal providers, and when appropriate, the patient’s family.”
• Purpose of Health Home:
  1. Improve access to and continuity of health care.
  2. Reduce health disparities among the underserved communities.
  3. Increase the utilization of preventive screenings.
  4. Increase participation in age-appropriate vaccinations.
  5. Reduce risk of preventable emergency room visits and/or hospitalizations.
  6. Improve continuity of health care delivery that results in meaningful health improvement and reduce fragmented care.
Over the past 40 years, academic nursing centers have been developing, implementing, and evaluating alternatives to the failing, mismanaged U.S. healthcare delivery system.

Purpose

• Design an integrated, innovative, accessible, high-quality, patient and family-centered sustainable model of Nurse-led care

• Create learning, research, and practice collaboratories for nursing and other students and faculty in the Health Science disciplines

• Provide excellent learning experiences for our students while building and sustaining our university community partnerships
Nurse-Managed Clinic Innovations

- Electronic Health Records – GE Centricity (Indiana), EPIC (UTHSC San Antonio)
- Clinic Design
- Cost and Value Analysis
- Population Management
- Rural and Urban Healthcare Delivery
- Medication Reconciliation and Safety
- Continuous Quality Improvement
- Public Health Quality Improvement
- Simulation in Primary Care

Performance Outcome Measures

- Evidence-based, Value-driven Care
- Patient Safety
- Quality of Care
- Cost
- Patient Satisfaction
- EHR
- Self-care Support and Community Resources
- Developmental Outcomes
- Care Coordination and Tracking
- ER Diversion
- Patient Flow/Wait times
- Needlesticks
- TB Surveillance
- Referral for Hospitalization

Key Elements for Long-Term Sustainability

- Patient and Family Centered Model
- Integrated model of discovery, learning, and engagement
- Diverse Financial Resources (Medicare/Medicaid, private insurance, donors, federal state and foundation funding)
- Human Resources (Critical)
- Administrative and faculty support
- Thoughtful and positive communication
- Clear business plan
- Creative broad partnerships: Communities, industries, and multiple disciplines
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**Sustainability: Building a Mosaic of Support**

- Financial Resources
  - Local Fundraisers
  - Federal, State, and Foundation Grants
  - Private Donors/Development
  - Clear Business Plan
- Medicare and Medicaid Billing
- Patient Revenues/Private Insurance

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**Patient-Centered Medical Home**

The patient-centered medical home (PCMH) includes:

1) the fundamental tenets of primary care: first contact access, comprehensiveness, integration/coordination, relationships involving sustained partnership;
2) new ways of organizing practice;
3) development of practices' internal capabilities;
4) related health care system and reimbursement changes.

All of these are focused on improving the health of whole people, families, communities and populations, and on increasing the value of healthcare.

Jaen C, et al. 2010

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**PCMH VALUES**

The value of the fundamental tenets of primary care is well established. This value includes:

- Higher health care quality, better whole-person and population health, lower cost and reduced inequalities compared to healthcare systems not based on primary care.
- The needed practice organizational and health care system change aspects of the PCMH are still evolving in highly related ways.
- The PCMH will continue to evolve as evidence comes in from hundreds of demonstrations and experiments ongoing around the country, and as the local and larger healthcare systems change.

Jaen C, et al. 2010
PCMH MEASURES

Measuring the PCMH involves the following:

- Giving primacy to the core tenets of primary care
- Assessing practice and system changes that are hypothesized to provide added value
- Assessing development of practices' core processes and adaptive reserve
- Assessing integration with more functional healthcare system and community resources

Jaen C, et al. 2010

PCMH Evaluation

- The PCMH, like primary care, is worthy of support, evaluation and evolution as a fundamental building block for a high-value health care system.
- In these efforts, it will be important to recognize the complex interactions of the PCMH at multiple levels, so that a narrow and short-term focus does not scuttle the potentially transformative nature of the PCMH before it has had a chance to make good upon its promise.

Jaen C, et al. 2010

UTHSCSA Clinical Enterprise Staffing

- 10 Pediatric, Family, and Women's Health Nurse Practitioners/APNs
- All faculty and staff are cross-trained
- Two collaborating physicians review 10% of charts per Texas Law
- Available 24/7 for consultation
- Physicians spend 4 hours/month in consultation, case discussions, team meetings, and record review

Mark Nadeau, MD, FAAFP
Dennis Conrad, MD, FAAP
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**UTHSCSA Student Health Center**

- **Brief History**: Founded in 1994 for students, faculty, and staff.
- **Managed Clinics**: Nurse-managed.
- **2007**: 2 to 4 exam rooms, 2 to 9 NPs.
- **2009**: Expansion to 4 exam rooms, 9 NPs.
- **Designated medically underserved population (MUP)**
- **3,800 Health Science Center students**
  - UTHSCSA Student Health Center
  - **10 Faculty Nurse Practitioners (PNPs, FNPs, Women’s Health NPs)**
  - Advanced Practice Public Health/Occupational Health Nurse Psych/MH Clinical Nurse Specialist/NPs
  - 3 BSN/RNs
  - Clinic/Billing Managers
  - Project, Grants, and Marketing Coordinator
  - Medical Assistant
  - Health Clerk

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**Child Health Evening Clinic**

- **For Children of Health Science Center Students to Support Community-based Health Homes**
- **Spring 2012 Launch**
- **Executive Director**: Julie Cowan Novak, DNSc, RN, MA, CPNP, FAANP
  - University of Texas Health Science Center
  - School of Nursing
  - Professor and Vice Dean, Practice and Engagement
  - Executive Director, UT Nursing Clinical Enterprise
- **Staff**:
  - Patsy Clarke, MSN, RN - Certified Pediatric Nurse Practitioner
  - Rebecca Fenton, MSN, Pediatric CNS - Clinic RN
  - Dr. Dennis Conrad, Collaborating Physician, UTHSCSA Department of Pediatrics

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**The Employee Health and Wellness Clinic**

- Adjacent to Student Health Center
- Established November 15, 2010
- 6,000 employees
- 70% from underrepresented groups
Employee Health and Wellness Clinic:

- 4 Faculty Nurse Practitioners
- Advanced Practice Nurse Public Health/Occupational Health
- Psych/MH Clinical Nurse Specialist/NP
- Collaborating Physician (24/7 consultation and chart review)
- BSN/RN
- Medical Assistant
- Clinic/Billing Manager
- Business Administrator
- Project, Grants and Marketing Coordinator
- Health Clerk

Services for Student Health Center and Employee Health & Wellness Clinic:

- Primary Care
- Comprehensive Wellness and Health Promotion
- Behavioral Healthcare
- Immunizations
- STD Screening/Treatment
- Patient Survey with QR Code
- Smoking Cessation
- Healthy Weight Management
- Pediatric Evening Clinic for Children of HSC Students
- Acute Illness and Minor Injury
- Minor Occupational Injury Assessment/Treatment
- Chronic Disease Management
- Quest Diagnostics phlebotomist, Mon-Fri, 8 am – 12 pm

Community Outreach

Health Home Project Goals:

To develop an accessible high quality efficient and cost effective system of care that establishes:

a) A Health Home for all enrolled children.
b) Education and training for all professionals who work with these children and their families.
c) Ongoing data collection at existing health home sites and initiate data collection in new and developing sites.
d) Community Partnerships.

Principle of Health Home:

- To identify and evaluate methods for expanding access to primary health care to Medicaid-enrolled SAISD.
- Provide health care for pre-kindergarten through first grade students (17,750 are Medicaid enrolled) at 58 different SAISD elementary schools.
- 7 pods: Feeder schools to the 7 SAISD High Schools.
- Provide primary healthcare, dental and psychological behavioral health care and health education services for SAISD children enrolled in Texas Medicaid.
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Health Home Population:

• Early Head Start and Head Start Programs are required to perform health screenings on each enrolled child.

• A Health Home designation must be made for the enrolled child.

• Over 3,000 San Antonio children enrolled in Avance Early Head Start and Family Service Association (FSA) and Avance Head Start need screenings and Health Home confirmation.

• Second target population: 7,750 Pre-K through second grade children enrolled in the San Antonio Independent School District (proposal currently under review).

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Health Home Partnership

• UTHSCSA School of Nursing, Community Pediatrics, Dental School, Behavioral Health, and Sub-specialties

• City of San Antonio

• Mayor’s Office

• Early Head Start / Head Start
  – Avance
  – Family Services Association

• Healy Murphy Alternative High School and Child Care Center

• San Antonio Independent School District (SAISD)

• Harlandale Independent School District

• Metro Health District – San Antonio Public Health Dept.

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Key Components:

• Texas Workforce Commission Training/Education
  – Pediatric nursing faculty as educators
  – Training for child development staff/bear and surrounding county, 10 week certification course for childcare providers

• Head Start
  – Health Home
  – Statutorily required screenings
  – School nurses
  – Pediatric Nurse Practitioners
  – Interdisciplinary Healthcare teams
  – Model for the city, region, state and beyond
  – $5 million under review
  – San Antonio Independent School District (SAISD)
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School Nurses on Head Start and Elementary School Campuses
- Trax: Screening, Health Promotion
- Injury & Infectious Disease Prevention
- Mental Health Team Partners

PNP or FNP Oversight – Head Start Health
- Assessment
- Intervention Plan
- Evaluation
- Home
- Assessment
- Intervention Plan
- Evaluation
- - Avance, Healy Murphy, 10
- Additional Sites

Community Pediatrics and other UTHSCSA Providers, e.g., Mental Health and Dental

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Health Home Maintenance

- Assessment – Analyze Texas Health Steps data and determine if additional assessment, intervention, and referral needed
- Intervention Plan – Identification of target areas such as asthma, lead exposure, childhood obesity, diabetes, developmental delay, based upon Texas Health Steps data analysis
- Education – Provide health education regarding healthy lifestyle choices, injury and disease prevention and other focus areas presented by community members
- Referral – Refer children whose needs are beyond the scope of the Pediatric Nurse Practitioner to a UTHSCSA Collaborative Partner
- Evaluation of intervention plan – Ongoing

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Health Home Sustainability

- Health Home
  - Create health home model
  - Facilitate nursing, medical, psychiatric/mental health, developmental and dental care
- Intervention/Referral
  - Determine need for additional intervention and referral
  - Take appropriate action to meet psychosocial, psychosocial, developmental and financial needs
- Environmental Assessment
  - Provide assessment of each Partner Head Start and elementary school campus in collaboration with Metro Health
- Care System Development
  - Develop systems that promote quality care and safe, healthy environments for children and whenever possible, their families

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Child Health Home Data Sources

- School of Nursing
- Community Pediatrics
- Pediatric Sub-specialties
- Dental School
- Metro Health

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Rich Educational Experiences:
DNP Projects Will Emphasize System Development

- APN/DNP students data collection and analysis
- Evaluation of evidence-based care
- Medication and other patient safety and quality improvement systems
- Optimal scheduling patterns, patient flow, and clinic design and sustainability
- Local to global health policy
- Lead Education Research Project

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Improving Lead Related Knowledge Among Health Care Providers in South Texas

Lisa Cleveland RN, MN, IBCLC, Andrea Berndt PhD, Victor German MD, PhD, & Anthony Scott PhD

Purpose:
To design and administer an interprofessional lead education program for San Antonio physicians and nurses and to compare pretest/posttest knowledge.

Background:
Elevated lead levels in children are associated with cognitive deficiencies, learning disorders, and behavioral problems. Nationally, Hispanic children under 5 years of age have higher lead levels than non-Hispanic whites. One of the most common sources of lead exposure is deteriorating lead based paint and dust often found in homes built prior to 1978. Many of San Antonio's Hispanic children reside in neighborhoods with old housing. Due to these risk factors, it is essential that healthcare providers in San Antonio are knowledgeable about lead exposure and prevention.

Method:
Physicians and nurses (N=448) responded to a 10 item lead knowledge pretest followed by a one-hour presentation focused on lead poisoning prevention. After the presentation, the 10 item posttest was administered. Open-ended questions were added to assess the most useful information and reactions to the presentation.

Results:
While both nurses and physicians demonstrated significant increases in knowledge scores, the increase for nurses was almost double that observed in physicians.

Discussion:
While all providers should be knowledgeable about lead, nurses are likely to perform the initial screening for lead related risk factors. Therefore, nurses must possess sufficient knowledge about lead exposure and prevention to ensure patient well-being.
Opportunity for Growth

- EHR implementation grant funding resulting from the HITECH Act
- HRSA grant received to support EHR – Health Home Linkage – “Go Live” September 2011
- Comparative Effectiveness Research Funding from AHRQ
- Expansion of UTHSCSA interprofessional health care provider educational programs and associated opportunities for funding

Avance Community Partnership Clinic & Healy Murphy Alternative High School and Day Care Center

- Established relationships 2005, Early Head Start Clinic opened in 2007
- Patient, family-centered primary care health home
- Nurse-led model: PNP, MA, Health Assistant, collaborating pediatrician from UTHSCSA Community Pediatrics
- PNH provide pediatric primary healthcare to 600 children enrolled in the Avance Early Head Start program and Healy Murphy Day Care Center
- Targets vulnerable children and families
- Sites for faculty practice and integration of the mission
- 95% of population of Hispanic origin
- 50% of Healy Murphy high school students are pregnant or parenting
- Public Health, Senior Leadership, Capstone and PNP preceptorships
- Site for masters and doctoral research
- Interdisciplinary service learning projects

Services:

- Developmental assessment/health promotion/disease prevention
- Parent coaching/counseling
- Behavioral Healthcare
- Acute illness diagnosis and treatment
- Chronic condition management
- Specialty referral and collaboration
- Lead education research project
Conclusions

- Performance outcome measures reflecting healthcare delivery in nurse-led, nurse-managed clinic networks provide a systematic process for continuous quality improvement.
- Clinic model serves over 3,800 Health Science Center Students, 6,000 employees, and 2,000 children enrolled in Head Start and day care centers.
- Health promotion, disease prevention, client, family, and community education; self-care emphasis, acute, episodic illness care, and management of stable chronic conditions are provided by the School of Nursing advanced practice nursing faculty and undergraduate/graduate students.
- This faculty practice Health Home model of healthcare delivery and evaluation provides early evidence of an accessible, safe, patient- and family-centered, cost-effective, and efficient system of care by advance practice nurses and members of the interdisciplinary healthcare and educational team.
- Holistic, evidence-based child and family-centered models must continue to develop and evolve for optimal healthcare delivery enhanced by university community partnerships.
- Preparing for AAAHC accreditation and NCQA Level III Medical Home designation over the next two years.