The Health Wagon: Nurses Empowering Rural Communities

Presenters:
Dr. Teresa Tyson, DNP, FNP-BC, FAANP
Dr. Paula Hill-Collins, DNP, FNP-BC, PPCNP, FAANP
Mission

The Health Wagon provides compassionate quality health care to the medically underserved people in the mountains of Appalachia.
In the Beginning
Experienced Nurse
Managed Leadership
Commitment, Compassion and Calling
Innovation

• Nurse Practitioner Managed Clinic
• Health Wagon services comprised of a mobile unit and two stationary clinics
• Provide dedicated care to 10 sites in Dickenson, Buchanan, Russell, Lee, and Wise counties on a weekly to biweekly basis
• Services are rendered free of charge; however, patient co-pays for appointments ($10)
• Use generic drugs when possible, rely on clinician’s diagnostic abilities, unprecedented collaboration with multiple entities, holistic care
Patients of the Health Wagon

- The Health Wagon is a medical home to over 4,724 patients
- 16,670 patient encounters in 2018
- The average age of the Health Wagon patient is 46
- 86% of the Health Wagon’s patients are uninsured, the remainder are considered under-insured, meaning they have health insurance but cannot afford patient pay responsibilities
- 60% are female
- 40% are male
Service Area

- Lee, Scott, Wise, Dickenson, Buchanan and Russell Counties
- The terrain is mountainous, covering 1,715 square miles, with numerous locations being geographically isolated
- Many residents lack adequate transportation which results in lack of access to health care
Robert Kennedy visited the Appalachian regions of Southwest Virginia and Eastern Kentucky in 1968 to evaluate the effects of the 4-year-old War on Poverty...
Sacrifice Zone and Historical Trauma

• Mountaintop Removal is the strip mining practice of blasting off the tops of mountains so that coal can be mined. This practice is prevalent in the Appalachian mountains.

• More than 1000 square miles of mountains have been destroyed in Appalachia.

• Hundreds of miles of streams have been polluted with heavy metals and acid mine damage.

• Flooding due to runoff from MTR sites is causing widespread property damage and loss of life.

• Property values have decreased as much as 90% due to damage from blasting and coal dust.
Health Wagon Challenges

- Small rural communities that do not attract the level of services available in urban developed communities,
- Tremendous need for primary and preventive health care,
- Economic disparity,
- Geographic isolation,
- Low level of education,
- High unemployment,
- Low rates of health insurance coverage,
- Lack of healthcare resources,
- Poor health status & disparities in Appalachian health care, and
- Increasing elderly population
Death rates from common causes are higher in the Health Wagon’s service area than in Virginia overall

- People in the service area are:
  - 42% more likely to die from heart disease
  - 46% more likely to die from chronic obstructive pulmonary disease
  - 47% more likely to die from pneumonia or influenza
  - 65% more likely to die from diabetes
  - 62% more likely to die from chronic liver disease
  - 61% more likely to die from unintentional injuries and
  - 30% more likely to commit suicide

Data source: Virginia Health Statistics. These are averages based on age-adjusted death rates for 2013.
Black Lung in Southwest Virginia

• Region has the largest cluster of Progressive Massive Fibrosis (PMF) documented scientific literature
• Black Lung is most prevalent in roof bolters and continuous miner operators
• Health Wagon is hosting group information settings for those affected in the region
• Responding with mobile outreach, community outreach, education and hope

Photo Credit: http://nhpr.org/post/what-black-lung#stream/0
Components of the Health Care Outreach

- Acute Disease Management
- Behavioral Health Clinics
- Cardiovascular Health Clinics
- Chronic Disease Management
- Colposcopy Health Clinics
- Dermatology Health Clinics
- Diabetic Education / Diabetes Prevention Program
- Ear, Nose and Throat Clinics
- Endocrinology Health Clinics
- Gastroenterology Health Clinics
- Hearing Aid Assistance
- Influenza Vaccines
- Lab and Diagnostic Services
- Medical Therapy Management
- Medication Assistance and Pharmacy Connect
- Nephrology Specialty Clinics
- Ostomy Clinics
- Physical Assessments
- Podiatry Health Clinics
- Pre and Post Op Surgery Clinics
- Psychiatry Health Clinics
- Psychological Counseling
- Pulmonary Health Clinics
Components of the Health Care Outreach

- Referrals and Follow-Up Systems
- Substance Use Disorder Counseling
- Telemedicine Capabilities
- Transportation Assistance
- Urology Health Clinics
- Women’s Health Clinics
- Wound Care Clinics
2018 Health Outreach Encounters and Values

Health Outreach Events
• 16,670 Patient Encounters

Value of Health Care Provided
• 2,472,641.25 Pharmacy Connect
• 1,954,700 Mobile and Clinics

TOTAL: $5,674,619
Smiddy Clinic, Wise, Virginia
Innovation in Our Community

- The Health Wagon is part of a Community Garden project funded by the Phillips Electronics through LIG Global

- We invite community members to walk around a track that surrounds it and to plant and pick fresh fruits and vegetables

- Individuals and Groups have attended - children and adults from local schools, our patients, local Extension Office, Wise Works, & general community members
Move Mountains Medical Missions (M7)

• In addition to the Health Wagon’s stationary clinics and regular mobile sites, the Health Wagon staff spearheads the annual M7 (formally Wise County Remote Area Medical (RAM)) Expedition. The largest medical outreach of its kind in the nation.

• Held annually at the Wise County Fairgrounds

• FREE three-day event in summer each year

• Volunteer physicians, nurse practitioners, dentists, nurses, opticians, ophthalmologists, dental hygienists, etc.

• The primary focus is eye, dental and medical care
• Eye- exam and prescription glasses made
• Dental cleanings, filings, extractions, and dentures
• Medical
• Primary Care
• Specialist Exams - endocrinology, cardiology, nephrology, ENT, pulmonology, dermatology, psychiatry, etc.
• Labs
• Digital Mammograms
• Pap Smears
• Chest X-Ray, Pulmonary Function Testing
• Women’s Health Procedures- LEEPs, colposcopies
• Ultrasounds
• Hearing Exam and Hearing Aids
• Bone Density
• Echocardiograms and EKGs
• Skin Biopsies
• Onsite Pharmacy
• Emergency
An Aerial View
A Snapshot of M7
2017 and 2019 ARMY Innovative Readiness Training Event (IRT)
The Health Wagon
Featured on 60 Minutes
“The best way to predict the future is to invent it”

-Buckminster Fuller
Innovation

The Health Wagon is a leader in health care innovation, through use of mobile health units, drone delivery of medication, and telehealth services.
Partners in Telehealth

- Utilizes an advanced computer system and broadband telecommunications that provides specialty services to patients
- Allows patients in secluded rural areas to go to local facilities, increases convenience and lowers cost of care
- The Health Wagon is the highest utilizer of telehealth services in VA
First Telecystoscopies in the World
1st FAA Drone Delivery Approved in the United States
The Health Wagon and U.S. Surgeon General Respond to Opioid Crisis
“Cardiovascular disease is taking a terrible toll on our families, our communities and our nation” James Blasetto, MD, MPH, Chairman of the AstraZeneca HealthCare Foundation.

Recipient of 4 grant awards for the program (7 grant awards total for two programs).

Phenomenal community partner; truly a good neighbor.

Developed creative heart healthy program, bringing healthcare to patients which is tailored to individual needs of the underserved.
Heart disease and stroke are the leading causes of death in Virginia (VA Department of Health).

Life expectancy is decreased by 10.2 years (Extremes of Virginia).

Individuals age 65 and under are at risk of developing cardiovascular disease as a result of unhealthy lifestyles, inadequate food sources, lack of physical activity and obesity.

Individuals with metabolic syndrome have a two-fold increase in risk for heart attack or stroke and five-fold risk for a heart attack or stroke (AHA).
Partner Focus – RWJ Barnabas Health
October 2016’s medical mission focused on gastroenterology. Free colonoscopies and endoscopies were offered to Health Wagon patients.

Given two days, our team saw 42 patients and performed 67 procedures.

Our staff included 1 gastroenterologist, 1 anesthesiologist and 3 support crew.

Olympus grant, scopes were provided.

Braintree Laboratories donated Suprep bowel prep kits.

Pathology services were donated through Watauga Pathology Association in Johnson City, TN.

Results—Gastrointestinal cancers detected, ten precancerous lesions, gastritis, H. pylori, esophagitis, and Barrett’s esophagus.
Partner Focus – RAD AID
2018 RAD AID Appalachian Radiology Outreach Event

• Ultrasound exams were provided for patients

• Ultrasound education and training was provided for clinicians

• RAD-Aid performed PACS Readiness Assessment Survey

• Ultrasound equipment donation anticipated to further clinical diagnostic capabilities
Beloved Bishop DiLorenzo Visits Wise RAM in 2015

“Inequality is the root of social ills”
Bishop Barry C. Knestout blesses the Health Wagon in 2018

“Then the King will answer, ‘Truly I tell you, whatever you did not do for one of the least of these, you did not do for Me’” – Matthew 25:40
Health Equality and Equity

“Equality in health” as “Minimizing avoidable disparities in health and its determinants - including but not limited to health care - between groups of people who have different levels of underlying social attributes” (World Health Organization)
Partner Focus - University of Richmond
Inter-professional Educational Experience

- Appalachian Health Expedition – dental, optometry, medical, nursing, social work.
- Pharmacy Students
- Residency Training Programs
- Business Administration Students
- Health Education Outreach Programs
- AmeriCorps Student Programs
- Telepsych Student Programs
Moral Imperative

• Liberty and Justice for all... includes concept of health care

• Don’t stand idly by in your brother’s blood (Concept Leviticus 19:16)

• Sr. Bernie responded to social injustice. She did not stand idly by.

“Inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto me.”

Jesus

(Matt. 25:40)
Respond with Love

• Respond as Sr. Bernie did with an act of love
• Volunteer
  - Medical (Physicians, Specialists, NPs, PAs, Nurses, Scribes, any and all)
  - Non-medical
• Contribute hours as a group
• Donate gifts-in-kind from our wish list
• Participate in a fundraising event
• Invite us to speak
• Schedule a tour of the Health Wagon
• Tell someone about the Health Wagon
• Make a financial donation
• Like us on Facebook
• Involve students inter-professionally
• Pray for the mission
To Donate, Text "Wagon" to 41444 or Call (276) 328-8850
We Accept: VISA, MasterCard, American Express, PayPal

To Donate $10.00
Text WAGON10 to 41444

To Donate $25.00
Text WAGON to 41444

To Donate over $25.00
Text WAGON (insert amount) to 41444

www.healthwagon.org

Donate
Contact Us

The Health Wagon

Dr. Teresa Tyson, DNP, MSN, FNP-BC, FAANP

Dr. Paula Hill-Collins, DNP, PPCNP, MSN, FNP-BC, FAANP

Phone 276-328-8850

Email:

drtysonnop@thehealthwagon.org
paulahill@thehealthwagon.org

Web Site: www.thehealthwagon.org