

Interprofessional POP (Pet Owner and Pet) Care: Turning Sick Care into Well Care for Homebound Older Adults and Their Pets

Bernadette Mazurek Melnyk, PhD, APRN-CNP, FAANP, FNP, FAAN
VP for Health Promotion, University Chief Wellness Officer, and Dean, College of Nursing
Laurie Millward, DVM, MS, DACVP
Assistant Professor, Veterinary Medicine
Holly Dabelko-Schoeny, MSW, PhD
Associate Professor, Social Work
Katie Klakos, MSW, LISW-S
Director of Field Education



PURPOSE

The purpose of this project is to pilot an innovative model of delivering a nurse practitioner (NP)-led interprofessional team-based model of care for older adults with multiple chronic conditions and their pets



Background

- Recent studies indicate that two million older Americans are completely or mostly homebound
- 23.5% (approx. 9.2 million) of people 65 and older characterize themselves as having ambulatory difficulties
- This population is likely to present with poorer physical and mental health outcomes, including high levels of depression, anxiety and cognitive impairment which increases non-compliance with treatment plans



POP Care Model

- Transdisciplinary teams of students from nursing, veterinary medicine and social work provide people and pet care in the homes of older adults identified through the Total Health and Wellness Clinic and the Veterinary Medicine Outreach Program



POP Care Model

- Prior to visiting patients, students complete four 15-20 minute online modules that cover the POP Care Project, the CDC One Health concept, evidence-based practice, the social determinants of health and age-friendly communities
- Each block of students visits the same 2 patients and pets once a week for four weeks. Teams round at the end of each day to discuss cases and to make plans for the following week of care
- Emphasis is placed on prevention and optimal well-being in addition to evidence-based management of chronic conditions

TRANSDISCIPLINARY FOCUS

Nursing

Health and wellness screening, preventive care and programming, information and guidance on accessing health care, healthy lifestyle behaviors and evidence-based strategies for managing chronic conditions



TRANSDISCIPLINARY FOCUS

Veterinary Medicine

Health assessments and wellness care for dogs and cats, including vaccines, heartworm testing, pet owner education and parasite prevention



TRANSDISCIPLINARY FOCUS

Social Work

Social determinants of health assessments and end of life planning to link patients to community resources that can support their ability to remain in their homes

Support and resources are also offered to caregivers when appropriate

Integration of the Three Disciplines for Optimal Care of People and Pets

- Pets are built into the older adult's plan of care and people are built into the pet's plan of care



"All of the simple problems in our communities have been solved. What are left are the complex ones."

--Dr. Tom Gregoire
Dean of the OSU College of Social Work



Transdisciplinary Practice Approach

VISIT	Assessment/Intervention Lead	Focus of visit
Week 1	Veterinary Medicine	Pet Care
Week 2	Nurse Practitioner	Primary Care Needs, Education, Prevention
Week 3	Social Work	Social Determinants of Health, Information and Referral, Needs of caregiver
Week 4	Follow up depending on needs of the patient	Planned during supervisory meetings

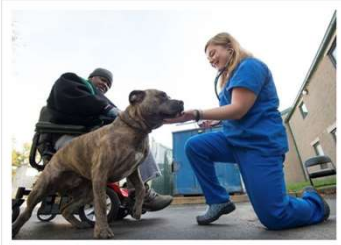
Transdisciplinary Education

- I never thought about...
- I feel relieved to know...
- I know the best language to use when...
- I can build relationships with clients through pets...
- Real-time consultation in homes...
- Coordinated care and services...

Readiness for Interprofessional Learning Scale (McFadyen et al. 2005)

POP Care Model Development

(Photo: Jason Hinto, The News Journal)



Aging Services and POP Care

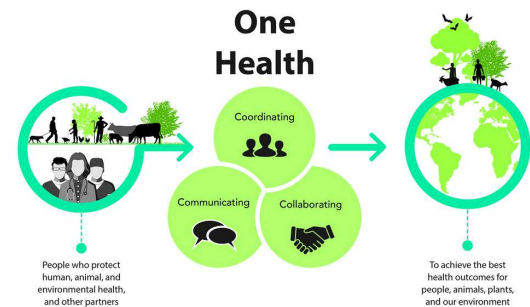


Community Support and Health Services
Accessible, affordable and high quality community and health services which meet the needs of older adults and contribute to their overall well-being.



The One Health Principle

One Health is an interdisciplinary initiative created to ensure the well being and optimal health of people, animals, and the environment through collaborative problem solving – locally, nationally, and globally.



One Health Initiative Mission Statement

"Recognizing that human health (including mental health via the human-animal bond phenomenon), animal health, and ecosystem health are inextricably linked, One Health seeks to promote, improve, and defend the health and well-being of all species by enhancing cooperation and collaboration between physicians, veterinarians, other scientific health and environmental professionals by promoting strengths in leadership and management to achieve these goals."

www.onehealthinitiative.com

World Organization for Animal Health:

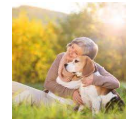
- Approximately 60% of all existing human infectious diseases are zoonotic
- At least 75% of infectious diseases of humans have an animal origin
 - Ebola, HIV, Influenza
- Five new human diseases emerge each year, with three being of animal origin
- An estimated 80% of agents with potential bioterrorist use are zoonotic agents.

www.oie.int

Who is involved in One Health?



The Human-Animal Bond

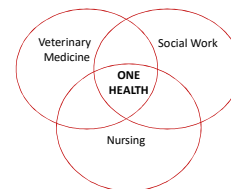


Human-Animal Bond



POP Care - One Health Actualized

Emergent Innovation grant from the Rita and Alex Hillman Foundation



POP Care - One Health Actualized



Case one example

- Client 1:
 - 72 year old Caucasian woman
 - Limited medical concerns
 - Living in older adult community
 - She has a 3-year old mixed breed dog
 - Primary focus is to have her dog evaluated and receive veterinary care



<https://www.mindbogg.com/blog/dogs-for-reading/>

Case one example

- Patient medical history and findings:
 - Primary care provider (PCP) of patient was identified as having restricted licensure
 - Patient's main medical concern was daily back pain
 - Ranked at 7 – 10/10 on pain scale
 - Gabapentin providing no relief
 - Used electronic wheelchair and physically deconditioned
 - History of alcoholic liver cirrhosis and ascites
 - Managed by OSU GI/Hepatology
 - In recovery from alcohol use disorder
 - Long-term smoker with COPD

Case one example

- NP-led interventions:
 - Identified new PCP > Total health and wellness POP care provider
 - Lidocaine patches and physical therapy
 - Back pain reduced to 4/10
 - Health maintenance
 - Mammogram completed
 - Lung cancer screening completed
 - Colonoscopy and upper G.I. scope completed
 - Working on smoking cessation



Case one example

- Social work interventions and outcomes:
 - Client's current identified resources:
 - Church support
 - Assistance from food banks
 - No concerns with insurance coverage
 - Client reports being sober from drugs and alcohol for 2 years
 - Feels she doesn't need any community resources
 - She is extremely resilient related to current environment and relationships



Case example one

- Social Work Interventions:
 - She was open to resources related to stress reduction and mindfulness
 - "Social determinants of health" assessment completed by student
 - Reviewed pain management through non-pharmacological pain management strategies resources



Case one example

- Veterinary care provided-
 - Educated the client about canine nutrition and weight loss
 - Provided tailored weight-loss plan for patient's unique needs
 - Identified ways they can exercise together
 - Educated the client about canine dental care
 - Provided pet-friendly toothpaste and toothbrush
 - Discussed plan for pet in case of emergency
 - Identified and treated ear infection
 - Provided leptospirosis vaccination
 - Provided heartworm testing
 - Dewormed for tapeworms
 - Provided a year supply of flea/tick and heartworm prevention



Case two example

- Client 2:
 - 77 year-old Caucasian woman
 - Living alone in one story home
 - She has 2 dogs in the house
 - She cares for 3 adult cats and 2 kittens who live outside
 - Primary concerns are financial issues and to have veterinary care for her pets



Case two example

- Patient medical history and findings:
 - Has a primary care provider that she likes
 - Has Medicare coverage
 - Needs surgery for bilateral cataracts that cause severe decrease in vision
 - Needs dental care and dentures
 - History of heart failure and hypertension
 - Chronic smoker with self report of no COPD
 - Deconditioned and underweight

Case two example

- NP-led interventions:
 - Nutrition consult
 - Added protein
 - Consideration for dental needs
 - Provided information on OSU financial assistance for ophthalmology at OSU
 - Provided handout on self pay low cost denture providers



Case two example

- Social work interventions and outcomes:
 - Client has high stress due to limited financial resources
 - Behind on paying utilities/bills
 - Dependent on family member for transportation
 - Home has high mortgage payment due to lien
 - Home is in poor condition
 - Recently death of roommate/significant other



Case two example

- Social Work Interventions:
 - Information on supportive services
 - Identification of insurance coverage information
 - Utility assistance programs
 - Linkage to resources for older adults
 - Community resources-
 - Food pantry services
 - Cleaning services
 - Veterinary services
 - Release of information signed

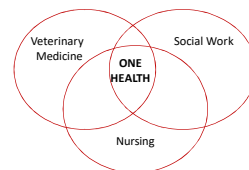
Case two example

- Veterinary care provided for two dogs and three cats-
 - Updated vaccines
 - Provided medications
 - Dewormed
 - Treated ear mites
 - Treated upper respiratory infection
 - Treated fleas
 - Provided heartworm testing
 - Provided FeLV/FIV testing
 - Provided a year supply of flea/tick and heartworm prevention



POP Care - One Health Actualized

- Exercising with pet:
 - Weight loss
 - Muscle development
 - Stress reduction
 - Social interactions
 - Increases the human-animal bond
 - Pain management
- Exercising with pet owner:
 - Weight loss
 - Muscle development
 - Pain management/prevention
 - Increases human-animal bond

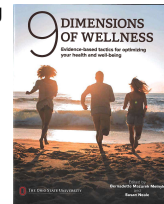


POP Care - One Health Actualized

- Vaccinated pet for zoonotic disease- Leptospirosis
- Flea prevention protects the pet owner as well
- Plan for emergency and hospitalization for pet
 - Reduces anxiety for pet owner so they are more willing to seek medical care
 - Protects the pet so that they have a plan for care

Evidence-based Tips for Your Own Wellness

- The optimal state of living well, regardless of an individual's spectrum of health
- Encompasses 9 dimensions: physical, intellectual, mental, emotional, social, occupational, financial, environmental and spiritual well-being



Current State of Health in the U.S.

- Overweight and obesity will soon surpass tobacco as the number one cause of preventable death and disease in the United States; 42% of Americans will be obese by 2030; 1 out of 3 Americans will have diabetes by 2050
- CDC
- One out of 2 Americans have a chronic disease yet **80% of chronic disease is preventable with healthy behaviors**
- Heart disease remains the #1 cause of death

Considering *All* Causes of Morbidity and Mortality, Behaviors are the #1 Killer of Americans



What Does The Evidence Tell Us? Stress and Depression are Prevalent



- One out of 4 to 5 individuals have a mental health problem
- Depression and stress are poor predictors of health and wellness outcomes



Every Day, We Make Behavioral Choices that Influence our Health and Wellness Outcomes



Based on Evidence, What Do We Know?

People who have the following behaviors have 66% less diabetes, 45% less heart disease; 45% less back pain, 93% less depression, and 74% less stress

- **Physical activity** - 30 minutes 5 days per week
- **Healthy eating** - 5 fruits and vegetables per day
- **No smoking**
- **Alcohol in moderation** - 1 drink per day for women, 2 drinks per day for men

Getting 7 hours of sleep and regularly engaging in stress reduction will result in even greater reductions in chronic disease.

Not the Size of Alcoholic Beverages in Vegas!



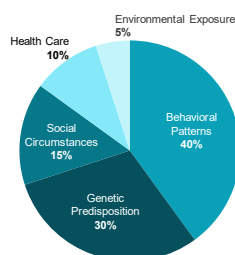
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Percent of adults who engage in the 5 leading health behaviors that can reduce the risk of chronic disease. Nearly 83% of health-care spending could be cut if more people employed:

- ❖ Not Smoking
- ❖ Exercising regularly
- ❖ Avoiding alcohol or drink in moderation
- ❖ Maintaining a healthy body weight
- ❖ Getting sufficient sleep

CDC, 2016

Contributors to Premature Death



New Year's Resolutions for 2009 ~~2011~~ ~~2012~~ ~~2013~~ ~~2014~~ ~~2015~~

1. Lose weight again ^{more}
2. Get fit next year
3. Give up alcohol ^{and cigarettes} less
4. Stand up to boss ^{find job}
5. Be nicer to my wife ^{ex-}
6. Sort out junk in shed ^{life}

My Main Reasons for Engaging in Healthy Lifestyle Behaviors: Who are Yours?



It's Time to Have Fun and Move for Energy!

