

ABSTRACT: 2016 ELAM Institutional Action Project Symposium

Project Title: NEURONET: Integrating the Community into Neurologic Care

Name and Institution: Barbara Jobst, MD: Geisel School of Medicine at Dartmouth

Collaborators: Jeffrey Cohen, MD, Chair Neurology, Robert Greene, Director Population Health, The Managing Epilepsy Well (MEW) Network, a thematic research network of the CDC; Mary Crowell, Epilepsy Foundation of New England; Robin Schaffer, Practice Manager Neurology;

Background, Challenge or Opportunity:

Reaching out into the community is not commonly seen as the responsibility of academic health care centers despite being essential to establish comprehensive health systems. Neurologic care in Northern New England remains incomplete due to many barriers such as referral patterns, distance and access to specialists. Leakage of Dartmouth attributed patients to other health systems has severe financial implications for community based care. Integration of newer models of care such as community based self-management remains underdeveloped despite the advent of many new, virtual technologies.

Purpose/Objectives:

(1) Create access to appropriate neurologic care from the primary care physician to the subspecialty neurologist in the region (2) reduce leakage of patients from the Dartmouth-Hitchcock Health System to other systems and (3) establish models for integration of self-management into clinical care.

Methods/Approach:

(1) We obtained data about existing neurologic resources in the region and subspecialty programs. Existing certifications for subspecialty neurology exist for epilepsy, ALS, headache, multiple sclerosis and muscular dystrophy, but require further investment into movement disorders and stroke. To enhance access a call center for neurology is being created and referrals will be streamlined. Community neurologists have been integrated into multidisciplinary conferences via WebEx. Data collection to establish a comprehensive stroke center and a strategy about establishing a multidisciplinary clinic for movement disorders have been initiated. We are actively working on providing tele-EEG services. We partnered with the Epilepsy Foundation to provide education in the region for primary care physicians. (2) We identified that loss of neurology care patients out of our system is between 3%-33% depending on the location, which translates into significant revenue loss. We established closer relationships with in-system neurologists in the community and the above mentioned call center will streamline scheduling between locations. (3) Include self-management into care and the community: On a national level a work group for distribution of self-management programs was established with the Managing Epilepsy Well Network. We partnered with the national and regional Epilepsy Foundation and the American Epilepsy Society to integrate and promote specific self-management, including virtual programs for epilepsy care. An evidence-based self management program for epilepsy was implemented at other institutions in the region (University of Vermont, University of Massachusetts, Maine Medical Center). We are evaluating whether self-management programs beyond research funded initiatives are cost effective in the Dartmouth ACO.

Outcomes and Evaluation Strategy:

Tracked outcomes include the number of referrals to neurology, loss of neurology patients from the health system and the number of patients enrolled into self-management programs in the region.

NEURONET: Integrating the Community into Neurologic Care

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Collaborators: Jeffrey Cohen MD, Chair Neurology, Robert Greene MD, Director Population Health, The Managing Epilepsy Well (MEW) Network, Mary Crowell, Epilepsy Foundation of New England; Robin Schaffer, Practice Manager Neurology, the Neurology Faculty, Geisel School of Medicine

Background Challenge and Opportunity

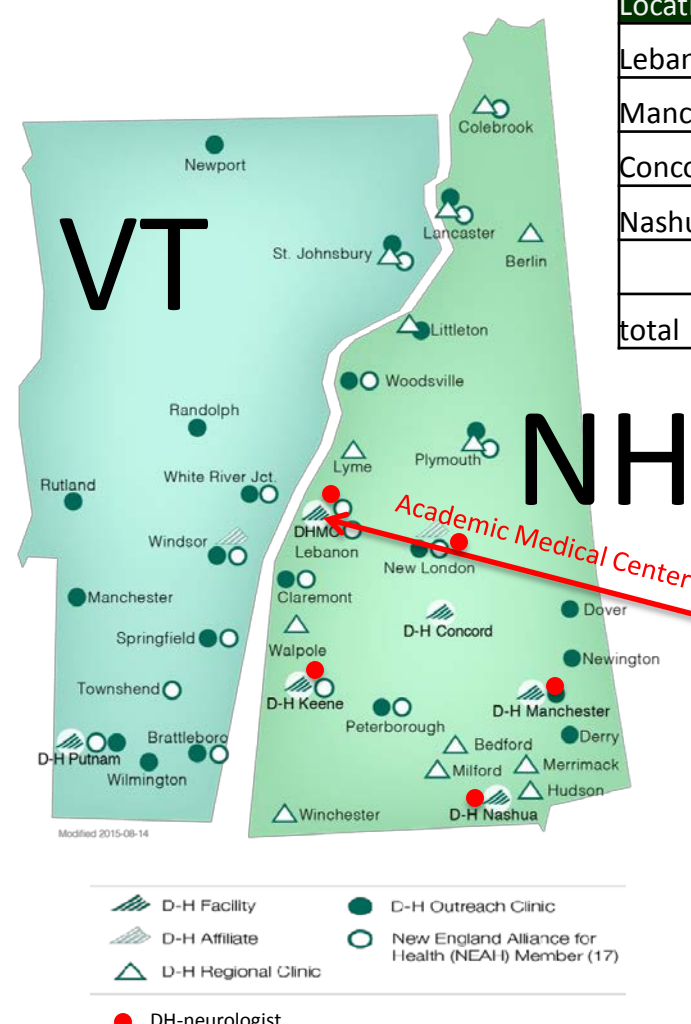
- Academic health care centers need to reach out to the community to establish comprehensive care.
- Comprehensive neurologic care in Northern New England has many barriers such as distance and restricted access to specialists.
- Loss of patients to other health systems has severe financial implications for community based care.
- Integration of new models of care such as community based self-management remains underdeveloped nationally and regionally

Purpose

- Create access to appropriate neurologic care in the region
- Reduce leakage of patients from Dartmouth-Hitchcock to other systems
- Establish national models for integration of self-management into clinical care

APPROACH: Gap Analysis

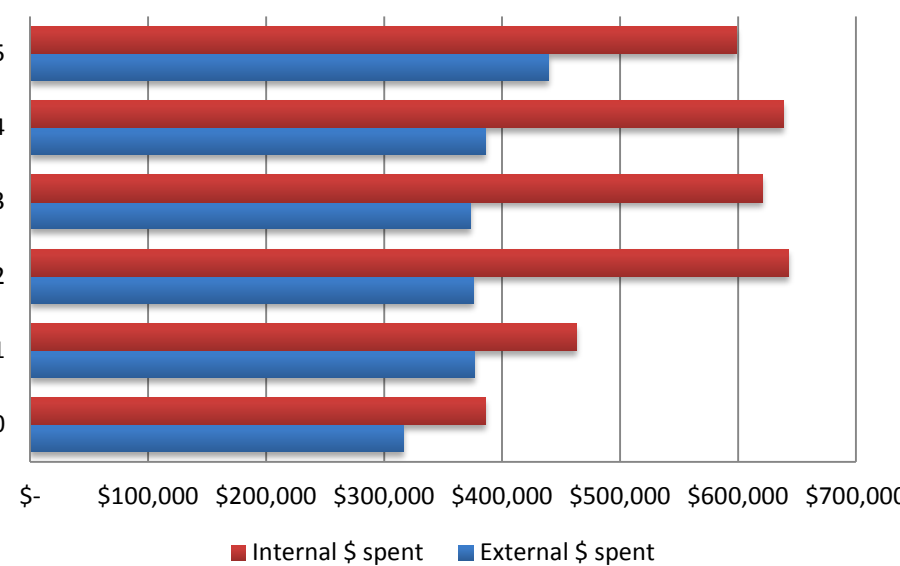
The Dartmouth-Hitchcock Health System (DH)



Referrals to neurology from DH-physicians and % patients referred outside the system (leakage)

Location	Total referrals	% leakage
Lebanon	3197	5%
Manchester	2324	3%
Concord	221	33%
Nashua	1610	10%
total	7352	7%

\$ spent on neurology professional services in Dartmouth attributed Medicare ACOs



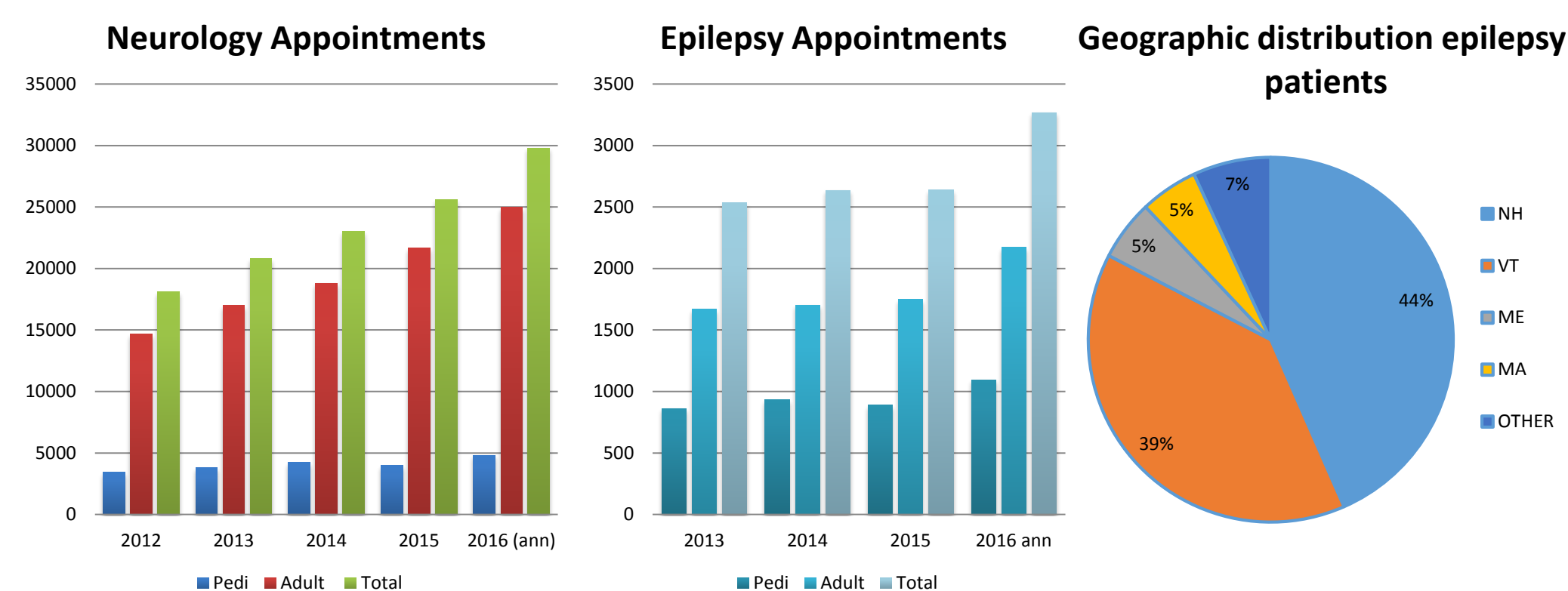
Neurology subspecialty evaluation in the region

Subspecialty	National Certification	Fellowship program	Gap
Epilepsy	Yes	Yes	
ALS	Yes	Yes	
Muscular Dystrophy	Yes	Yes	
Movement disorders	No	No	multidisciplinary clinic
Multiple Sclerosis	Yes	No	
Headache	Yes	Yes	
Behavioral Neurology	No	No	multidisciplinary clinic
Stroke	No	No	Data collection for comprehensive stroke center certification

APPROACH (regional): Enhance Access and Reduce Leakage

- Creation of call center for neurology for regional neurology scheduling and improves access
- Integration of community neurologists via WebEx in multidisciplinary conferences such as the surgical epilepsy conference.
- Integration of community neurologist into academic health center and academic neurology.
- Establishment of tele-EEG services.
- Recruitment of neighboring large community hospitals and academic medical centers to participate in research studies originating at Dartmouth (Maine Medical Center, University of Vermont, University of Massachusetts).
- Partnership with the Epilepsy Foundation of New England to provide a lecture series 'Epilepsy 101 for Primary Care Physicians' in New Hampshire.

EVALUATION (regional)



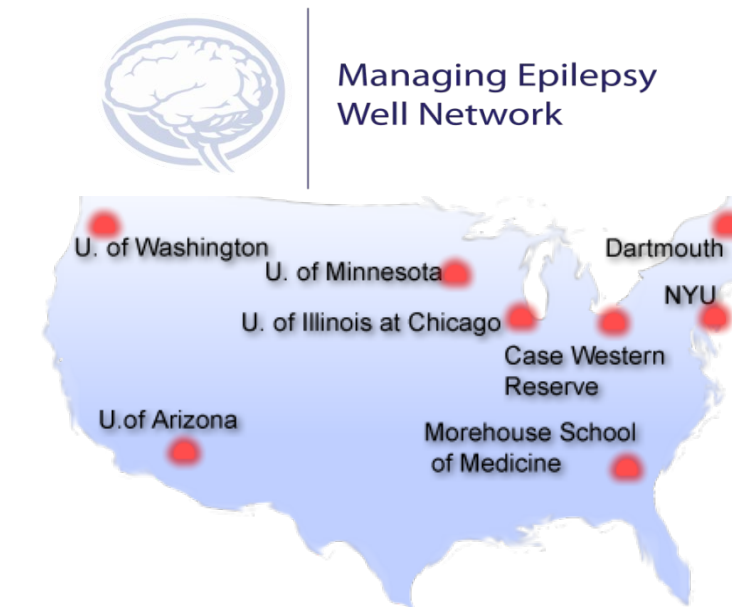
Conclusion and Future Directions

- Community engagement is an important aspect of academic medicine
- Self-management is an integral part of medical treatment
- Outcome data will be continued to be collected for all subspecialties within neurology and MEW

APPROACH (national) : Integrate Self-Management into Care

The Managing Epilepsy Well Network

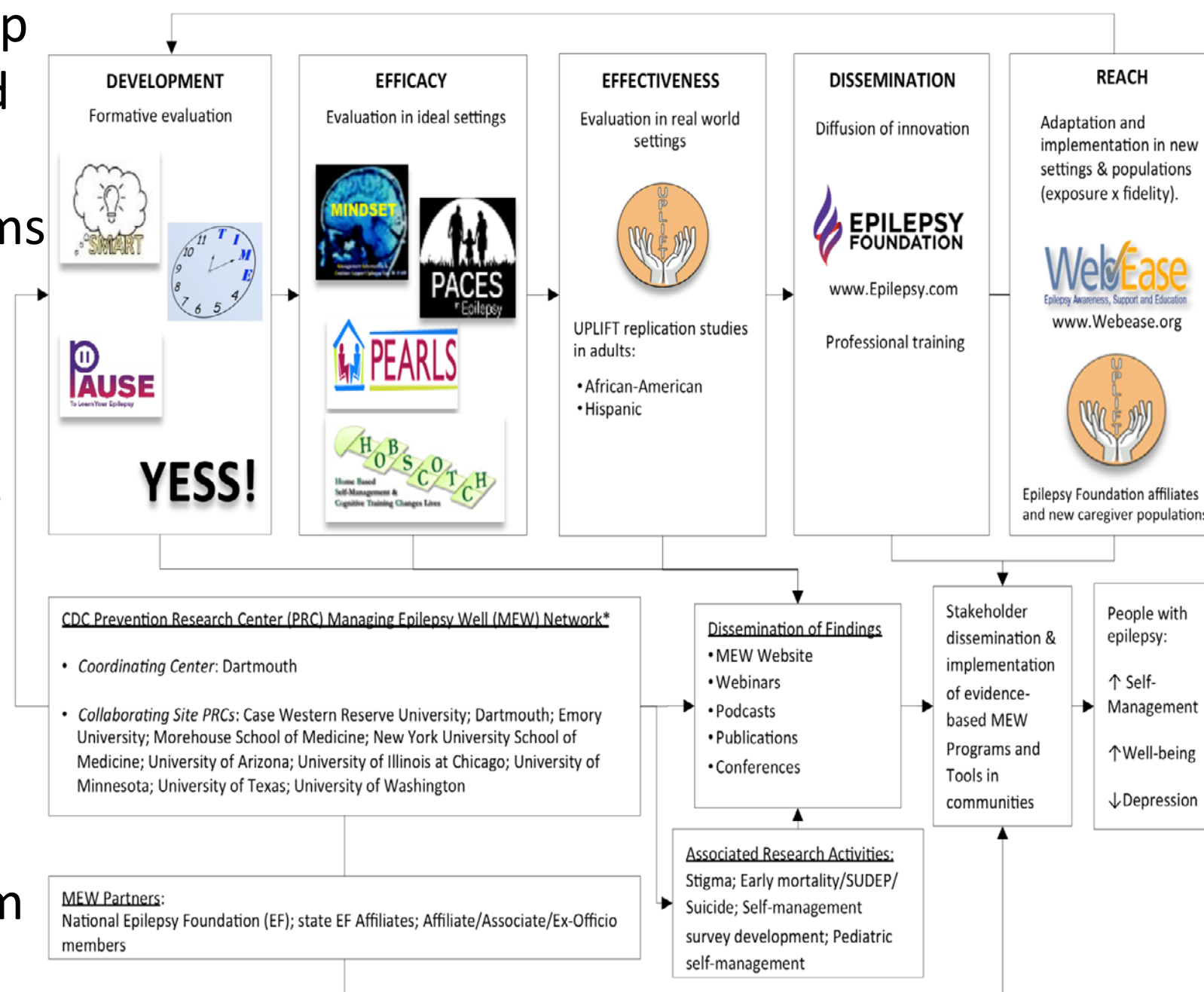
Coordinating Center: Dartmouth



Mission: To facilitate and implement research related to the development and evaluation of self-management tools, and support the dissemination and use of self-management programs for people living with epilepsy and their families.

<http://web1.sph.emory.edu/ManagingEpilepsyWell/>

- Creation of workgroup for dissemination and sustainability of self-management programs
- Development of toolkits for program dissemination
- Partnerships with the national Epilepsy Foundation and the American Epilepsy Society to apply for funding for self-management program distribution.
- Dartmouth's own self-management program (HOBSCOTCH) was distributed within New England to other epilepsy centers.
- A database to capture all patients enrolled into self-management studies has been established.



EVALUATION (national)

- Number of patients enrolled into self-management studies (database)
- Yearly self-evaluation of the MEW-network
- Number of publications within MEW (11 peer reviewed articles in 2015)
- Report on number of states (21 in 2015 for UPLIFT), centers, institutions delivering self-management programs or patients enrolling into programs