Project ECHO-Nevada
TASC-90 Webinar
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The Problem, Part 1

Map 5: Selected Northeastern States Placed Within the State of Nevada

Nevada Office of Rural Health (2013)
Recent estimates show 6 out of 10 Nevadans live with some form of chronic disease. More Nevadans die each year from chronic disease than from all other causes of death combined. In 2011, the estimated financial burden from chronic disease on the citizens of Nevada was in excess of $20.3 billion.
The Problem, Part 3
Medical and Surgical Specialties
Number of MDs per 100,000 Population – 2010

General Surgery: 8.1, 9.8, 12.0
Orthopedic Surgery: 5.5, 7.5, 8.2
Cardiovascular Disease: 5.3, 4.9, 7.4
GI: 2.7, 3.2, 4.3
Psychiatry: 6.9, 9.0, 12.9

Outcomes of Treatment for Hepatitis C Virus Infection by Primary Care Providers

Sanjeev Arora, M.D., Karla Thornton, M.D., Glen Murata, M.D., Paulina Deming, Pharm.D., Summers Kalishman, Ph.D., Denise Dion, Ph.D., Brooke Parish, M.D., Thomas Burke, B.S., Wesley Pak, M.B.A., Jeffrey Dunkelberg, M.D., Martin Kistin, M.D., John Brown, M.A., Steven Jenkusky, M.D., Miriam Komaromy, M.D., and Clifford Qualls, Ph.D.

N Engl J Med
Volume 364(23):2199-2207
June 9, 2011
Sustained Virologic Response According to Genotype and Site of Treatment.

Table 2. Sustained Virologic Response According to Genotype and Site of Treatment.*

<table>
<thead>
<tr>
<th>HCV Genotype</th>
<th>ECHO Sites</th>
<th>UNM HCV Clinic</th>
<th>Difference between ECHO Sites and UNM HCV Clinic</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>All genotypes</td>
<td>152/261 (58.2)</td>
<td>84/146 (57.5)</td>
<td>0.7 (−9.2 to 10.7)</td>
<td>0.89</td>
</tr>
<tr>
<td>Genotype 1</td>
<td>73/147 (49.7)</td>
<td>38/83 (45.8)</td>
<td>3.9 (−9.5 to 17.0)</td>
<td>0.57</td>
</tr>
<tr>
<td>Genotype 2 or 3</td>
<td>78/112 (69.6)</td>
<td>42/59 (71.2)</td>
<td>−1.5 (−15.2 to 13.3)</td>
<td>0.83</td>
</tr>
</tbody>
</table>

* The rates of sustained virologic response are not reported separately for six patients with genotype 4 or genotype 6. ECHO denotes Extension for Community Healthcare Outcomes, HCV hepatitis C virus, and UNM University of New Mexico.
The Mission of Project ECHO Nevada

• To improve the health and well being of Nevadans
• Increase the capacity of primary care clinicians in rural and medically underserved areas of Nevada to safely and effectively treat chronic, common, and complex diseases
  – Keeping care and dollars in communities
  – Providing service to all comers
ECHO-It’s Not About The Technology

• Case-based, interactive discussion is the key
• Off the shelf video conferencing connecting a specialty team to PCPs to co-manage complex patients
  – *Zoom web-based system*
• ECHO is not telemedicine, i.e.- no patient-provider interaction, thus no HIPAA or licensure issues
**Case presentation template**

CASE PRESENTATION TEMPLATE  
Diabetes/Cardiovascular Risk Reduction Clinic

**Date:**  
**Presenter Name:**  
**Clinical Site:**  

**Patient Name:**  
**DOB:**  
**Gender:**  
**Occupation:**  

**Educational Level:**  
**Current Smoker:**  
**Amount:**  

**Check One:**  
- [ ] New Patient  
- [ ] Follow-up  

**Alcohol Use:**  
**Amount:**

**WHAT IS YOUR MAIN QUESTION ABOUT THIS PATIENT?**

- [ ] Height:  
- [ ] Weight:  
- [ ] BMI:  
- [ ] Waist Circumference:  
- [ ] BP:  

**Family History of DM?**  
- [ ] Yes  
- [ ] No  

**Family History of CYD?**  
- [ ] Yes  
- [ ] No

**Problem List**

<table>
<thead>
<tr>
<th>Problem List</th>
<th>Duration</th>
<th>Current Treatment/Amount/Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glucose:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chol:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDL:</td>
<td></td>
<td></td>
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<tr>
<td>HDL:</td>
<td></td>
<td></td>
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<tr>
<td>Triglycerides:</td>
<td></td>
<td></td>
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<tr>
<td>TSH:</td>
<td></td>
<td></td>
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<tr>
<td>Creatinine:</td>
<td></td>
<td></td>
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<tr>
<td>HbA1C:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urine/Micro Alb:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALT:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current medication list:</td>
<td>ASA?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Statin?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>ACE/ARB?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Prevention of diabetes complications:**

- [ ] Date of last foot exam:  
- [ ] Date of last dental visit:  
- [ ] Date of last eye exam:  

- [ ] Date of last depression screening:  
- [ ] Date of last diabetes education:
ECHO-Demonopolizing Knowledge

• A new paradigm
  – *Most requests for consultation are to answer a single question*
  – *A free transfer of knowledge from specialists to primary care providers; once given the recipient has it for a lifetime*
  – *Eliminates enormous waste (direct and indirect costs) from the system*
Typical panel of a busy PCP
(Potential benefit to thousands of patients)

300 Diabetes patients
300 Diabetes patients
300 Diabetes patients
10 Diabetes patients each

Primary care provider- MD
Primary care provider- DO
Primary care provider- PA
Primary care provider- ANP
Community health workers, nutritionists...

Rural or community health center providers
(5-15 providers for 60-90 minutes)

300 Diabetes patients
300 Diabetes patients
300 Diabetes patients

Specialist team; eg. Diabetes

University faculty- Reno or LV
~3 professionals for 2 hrs.
ECHO and Flex—Overlapping Missions
An Evolution the Telehealth/Flex Relationship

• Quality improvement
  – Pharmacy management/antibiotic stewardship
  – Optimize utilization of consultants/transports
  – Support MBQIP

• Health system development
  – Virtual ACO
  – Integration with EMS and community paramedicine

• Dissemination of operational “best practices”
Impact and Outcomes of Project ECHO Nevada

• Expand the scope of rural and frontier primary care workforce
• Reduce professional isolation and improve primary care recruitment and retention
• Free CME and nursing CEU for rural physicians, nurses, P.A.s
• Improve reimbursement to participating rural hospitals, clinics, and providers
Impact and Outcomes of Project ECHO Nevada

- **Improved access** to specialty care for rural and medically underserved areas of Nevada
- Improve patient outcomes and timeliness of care for chronic and complex disease states
- Rapid dissemination of practice changing information
- Track patient outcomes and treatment provided by participating rural clinicians
Project ECHO Nevada Clinics- 2015

- Diabetes & cardiovascular disease risk reduction
- ID/Antibiotic stewardship
- Sports Medicine
- Endocrinology
- Gastroenterology
- Rheumatology
- Mental health professional development
- Autism evaluation

Diabetes Clinic,
Grover C. Dils Medical Center
Caliente, NV 4/5/2012
Project ECHO-Challenges

• Funding, funding, funding/sustainability
  – Medicaid, Medicare, Commercial insurers
  – Philanthropy
• Identifying specialty faculty
• Freeing PCPs from clinic responsibilities to participate
• Proving success in non-curable chronic conditions
Project ECHO-Nevada Pipeline

- Pain management/addiction
- Behavioral health in primary care
- Diabetes prevention program- co-developed with Cooperative Extension
- Geriatric/dementia assessment
Building a healthcare community across Nevada