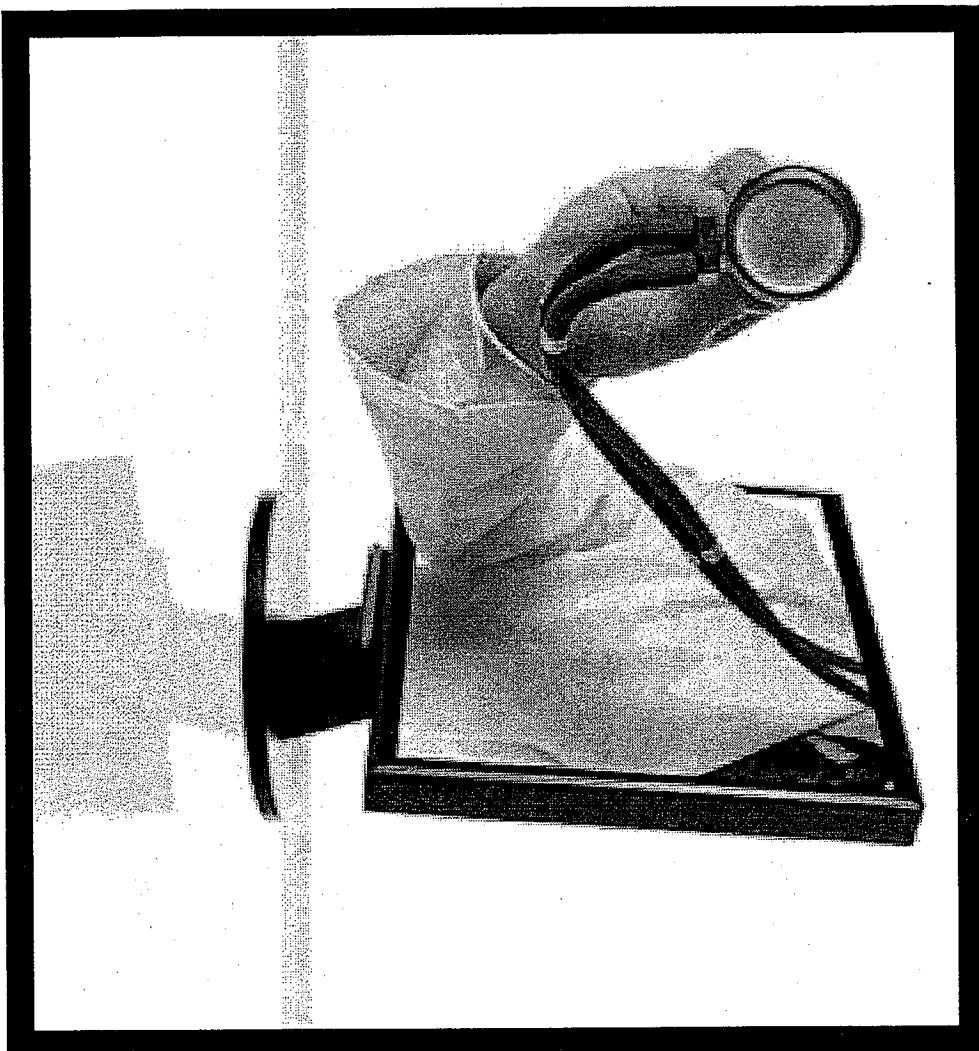


# **Virtual Health Care**

Combining Telehealth eMentoring with  
CME for Rural Populations



# Agenda

- Introductions
- Virtual Health Care - Telehealth eMentoring
  - A new avenue of healthcare delivery to empower rural clinicians
- eMentorU
- One to one mentorship delivered electronically to the rural provider and their patient in the rural community
- Discussion
- Our Capabilities (About Us) – optional

# Introductions

• Roger Cady, M.D.

• Board certified family physician and headache specialist; Founder of Primary Care Network; Director of Headache Care Center and ClinVest

• Brad Hedrick, MS

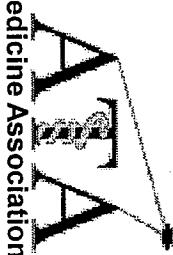
• Chief Information and Technology Officer of Primary Care Education and Banyan Group

• Kathleen Farmer, PsyD.

Neurophysiologist and Pain Management Specialist at Headache Care Center Springfield, MO Actively involved with Accreditation Council for Continuing Medical Education (ACCME)

# MEDICAL EDUCATION AND MENTORING

“Medical education and mentoring, which range from the provision of continuing medical education credits for health professionals and special medical education seminars for targeted groups to interactive expert advice provided to another professional performing medical procedure.”



The American Telemedicine Association

# **Changing Landscape of Healthcare in US**

- Healthcare costs are projected to rise dramatically in the next decade
- Rural healthcare delivery is being threatened by fewer providers and cost containment efforts
- Retaining qualified rural clinicians is increasingly challenging
- Disease conditions expected to escalate healthcare expenditures are rising dramatically
- Medical training in chronic disease is lacking in medical training
- The most common chronic diseases are costing the US economy 1 trillion dollars ex. Obesity, smoking, pain management,  
ref. Kaiser Healthcare Report

The next world-wide epidemic is not an infectious disease...

It is obesity

# Changing Landscape of Healthcare in KS

According to America's Health Rankings:

- High prevalence of many chronic diseases ex. obesity, COPD, pain, diabetes,
- Limited availability of primary care healthcare providers; FP, OB/GYN, psychologists/psychiatrists
- In the past year, the percentage of person's under 18 and in poverty increased from 18.0 to 23.1% adding a significant future burden to Medicaid
- In the past five years, diabetes increased from 6.9 to 8.4% of the adult population. Currently, 179,000 Kansas adults have diabetes.

# Cost Projections for Obesity

- The Congressional Budget Office 2007 report:
  - Per capita health expenditures for obese adults is 38% more than for normal weight adults
  - If current trends continue, 103 million American adults will be considered obese by 2018
- The U.S. is expected to spend \$344 billion on health care costs attributable to obesity in 2018 translating into an increase of \$3,339 annually for every person considered obese over normal weight individuals
- Prevalence of obesity for the state of Kansas:

2008: 32.8%	2013: 38.8%	2018: 46.0% [1]
-------------	-------------	-----------------

# Patient-Centered, Individualized Care

- Today's healthcare model is evidence-based that determines the efficacy of a study population
  - This does not predict the response of an individual patient

In many clinical trials non-response rates are as high as 40%

## Treatment of Acute Migraine With Subcutaneous Sumatriptan

କାହାର ମୁଦ୍ରା କିମ୍ବା କିମ୍ବା କିମ୍ବା କିମ୍ବା କିମ୍ବା କିମ୍ବା

## Treatment of Acute Migraine With Subcutaneous Sumatriptan

We propose that viable solutions comes  
from the heart of America...

Kansas

# eMentorU

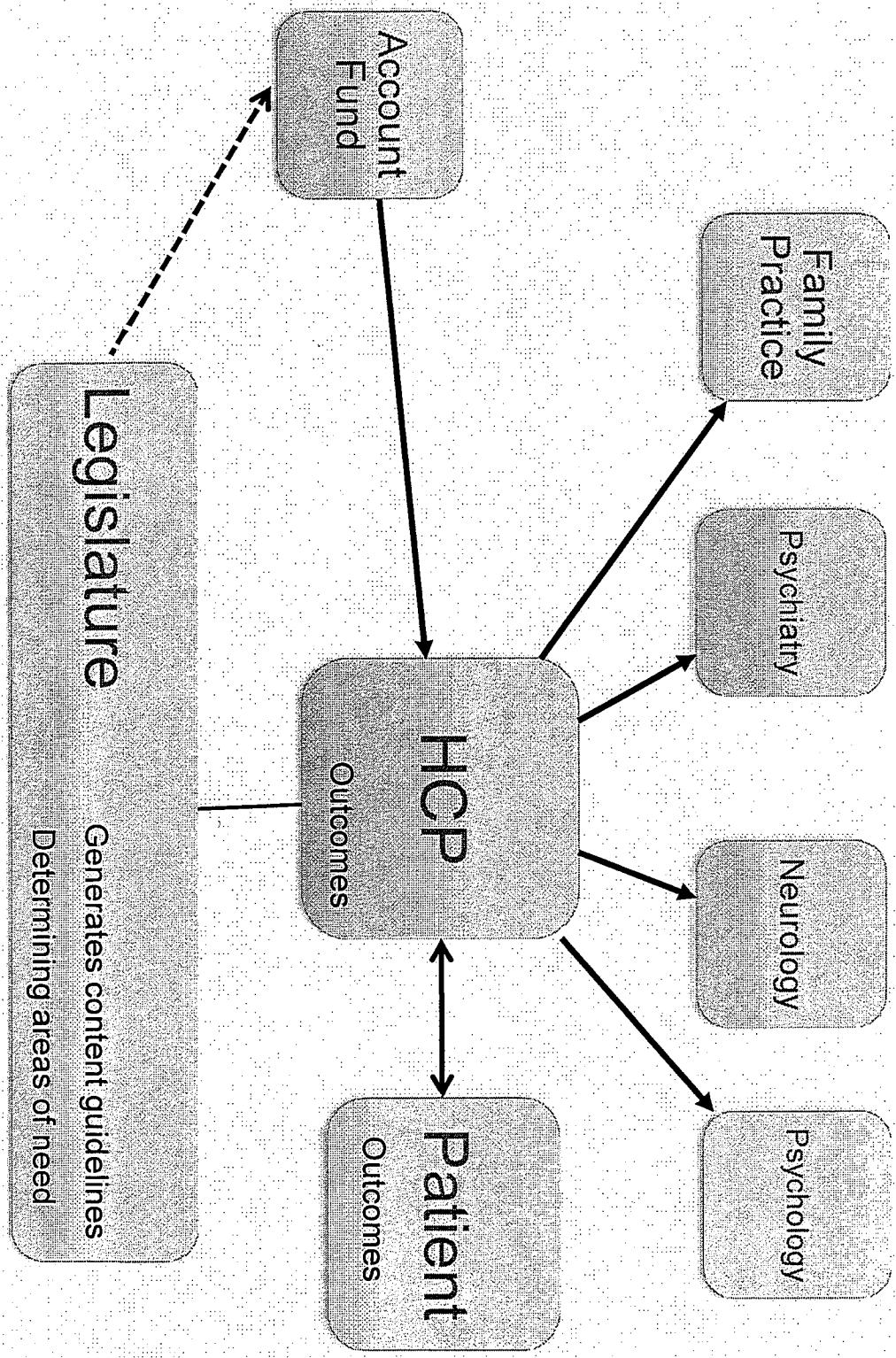
## A Personalized Medical University Without Walls

# eMentorU

## A University Without Walls

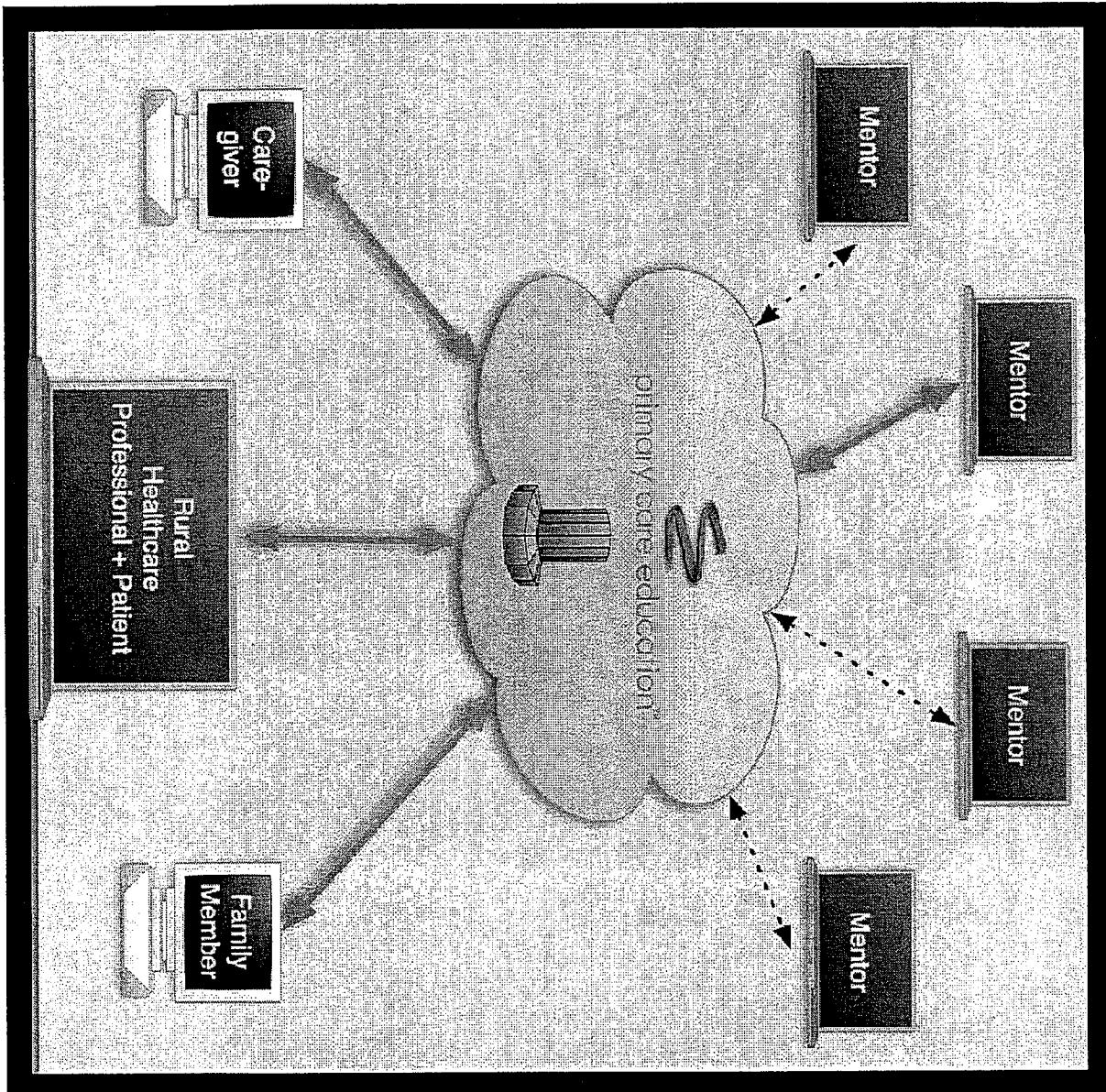
- Step 1: Legislator assigns educational priority based on medical needs of citizens and cost effective delivery of care
- Step 2: Building meaningful educational dialogue among rural HCP, their patients and specialists
- Step 3: Community-based electronic educational programs that develops primary, secondary, and tertiary strategies for specified disease states. (i.e. a village of care)
- Step 4: Outcome measures to determine success and needed improvement

# University Without Walls



# Solution

## A Virtual Health Care Ecosystem



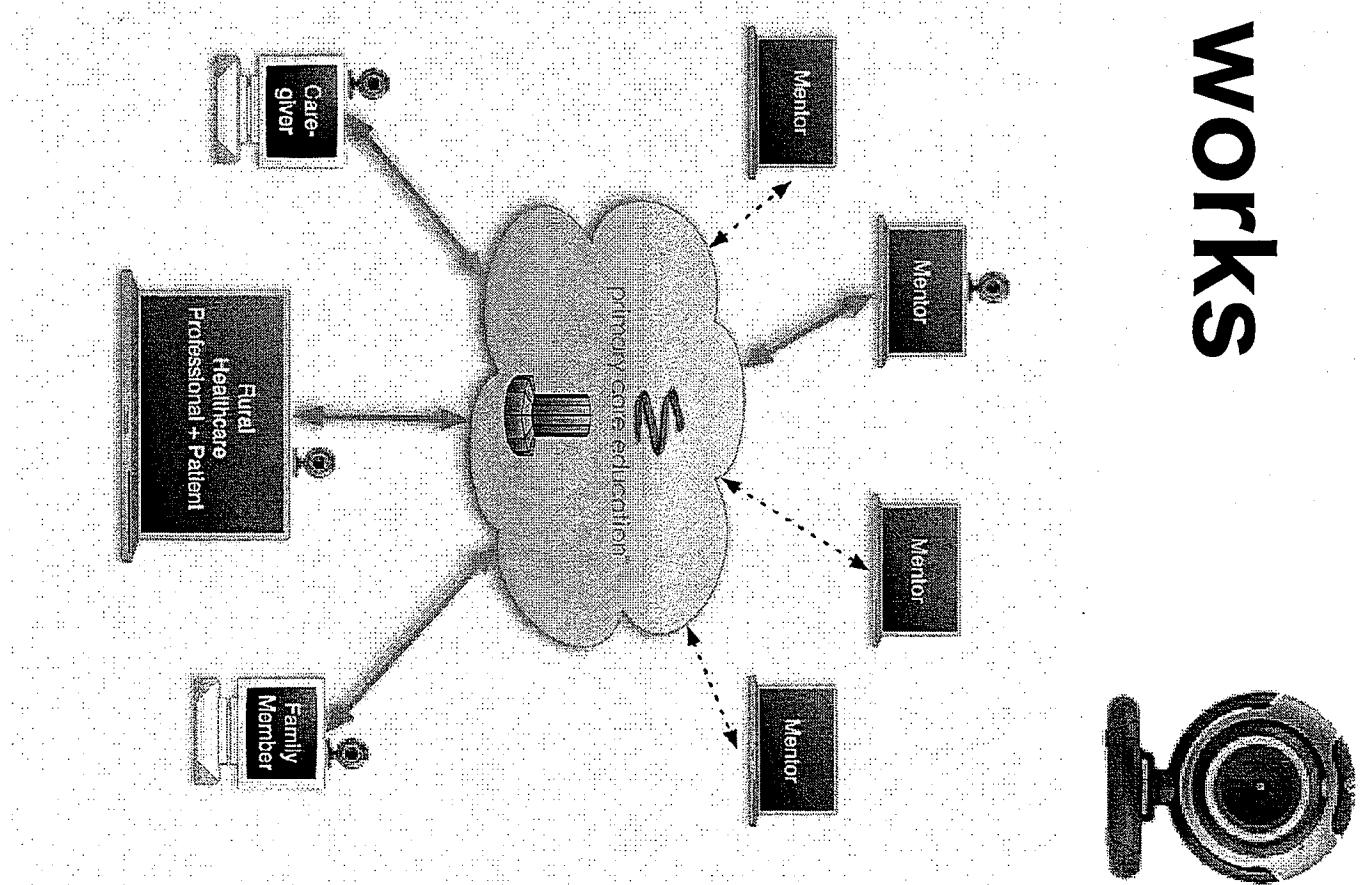
# How it works

Reach out to rural doctor's through a state-wide recruitment campaign

Rural physician is invited to search and schedule a time with an expert through our web-based system

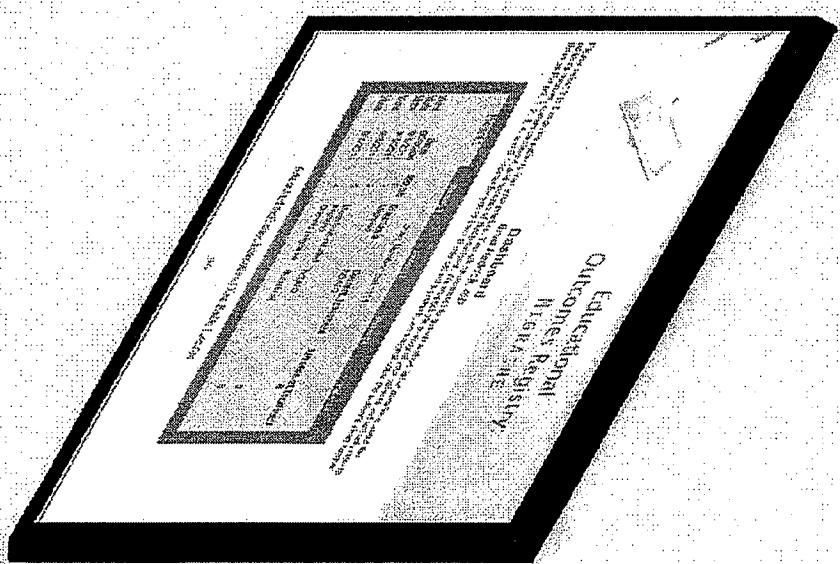
A computer, web-cam, and internet connection is all that is required - no proprietary hardware or software

Videoconferencing session may include patient and family from different geographic locations



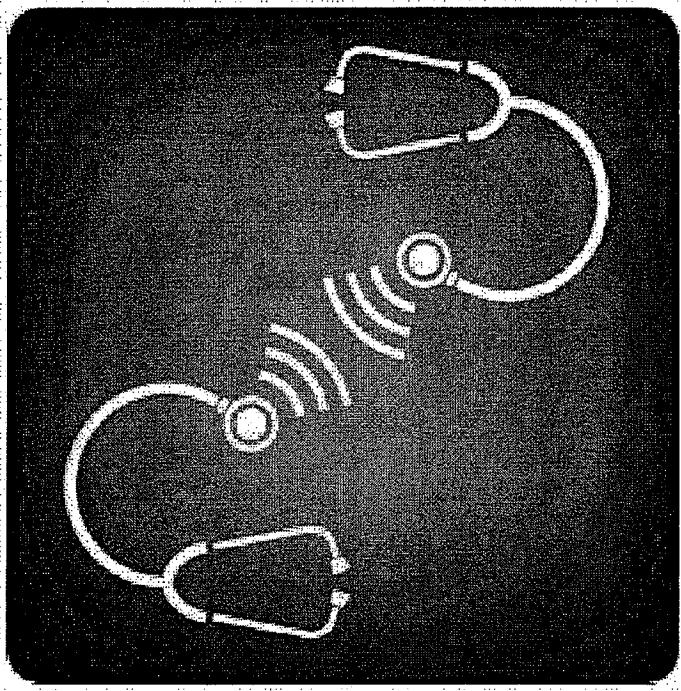
# Giving the rural healthcare provider a choice

- Provide a "CME account" of up to \$1500 to specific healthcare professionals in targeted demographics
- Average video consult would be \$500/session earning providing up to 2 CME credit hours and a medical consultation
- Experts are chosen based on their area of expertise and would be part of a clinician-driven rating system
- Point of contact CME
  - Earn additional CME by participating in outcomes. Patient registry and surveys

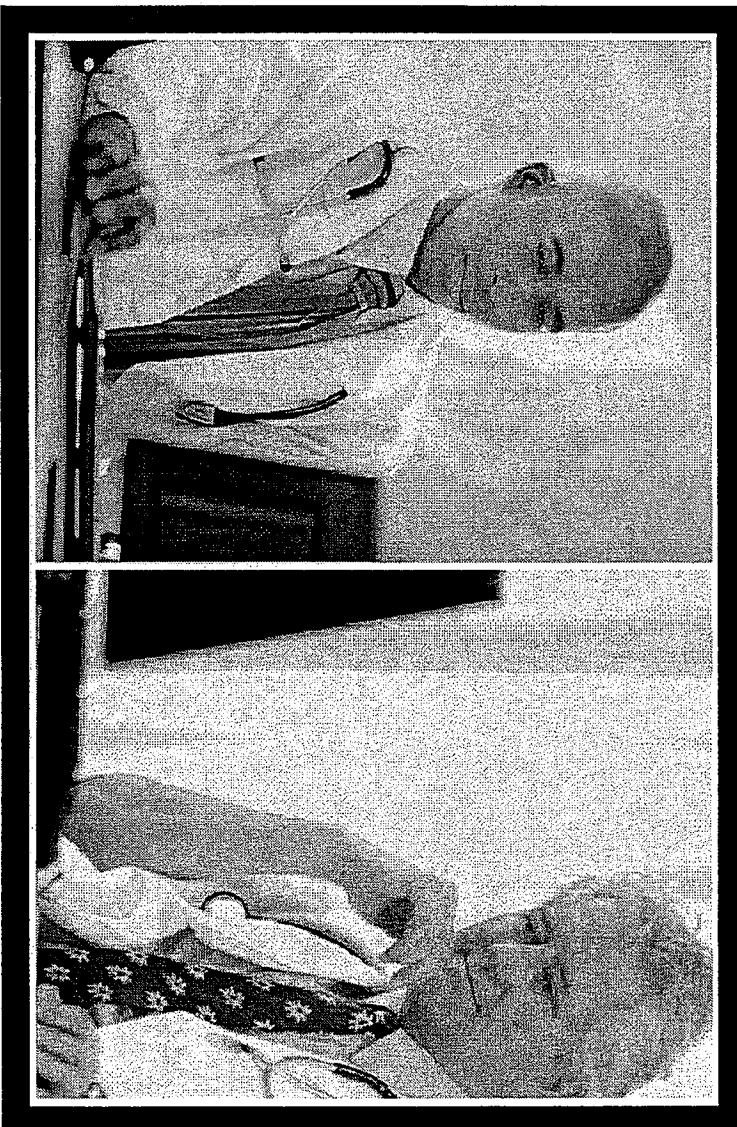


# Benefits

- Valuable CME credit is awarded
- Patient healthcare is improved
- Leaving the community with a better trained healthcare professional



# We connect the right healthcare professionals with the right disease education

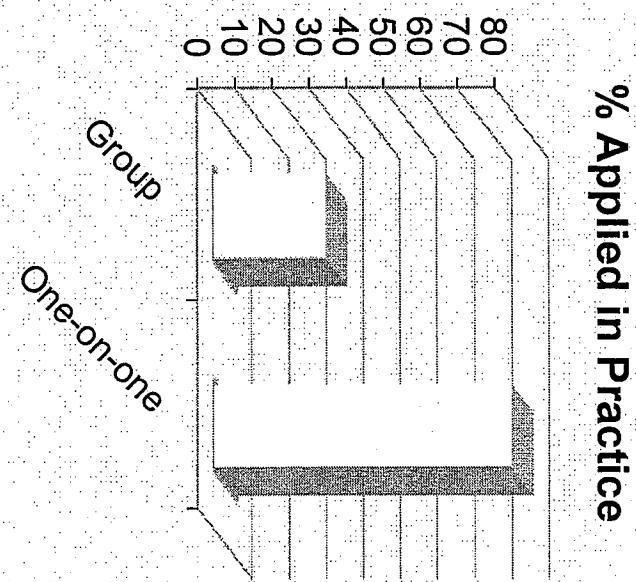


- Taking education and support where it's most needed: the rural outliers.
- A valuable resource - our growing network of members from across the United States
- Deliver education through proven technologies such as Cisco's Webex Training Center, or the more robust HealthPresence collaboration platform

# One-on-One Education Makes a Difference

Findings from recent Botox preceptorship educational activities:

- With group-based workshops, only 30% leave as injectors

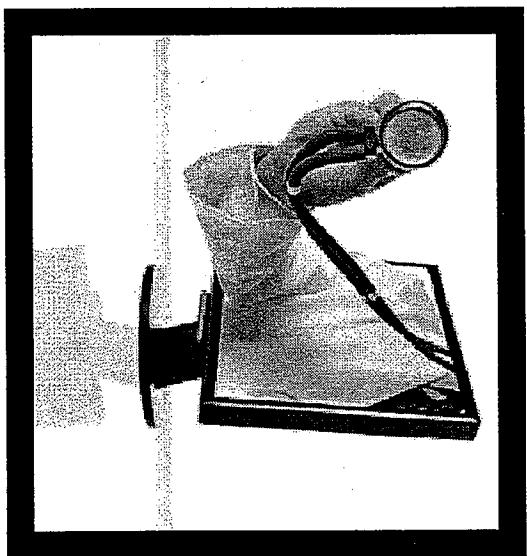


- With one-on-one-based workshops, 80+% become injectors

# eMentor Overcomes Barriers

- Improves the isolations inherent in rural practice
- Brings education to the community

- Difficult to get time off and is cost prohibitive for rural doctors to attend live CME activities
  - Models discussions of medical problems that can uncomfortable subjects
- "Telemedicine, particularly when used for applications such as continuing education, can help retain rural providers by overcoming feelings of isolation and fears of falling behind in knowledge of current best practices."*



# **“Technology-enabled” model of care**

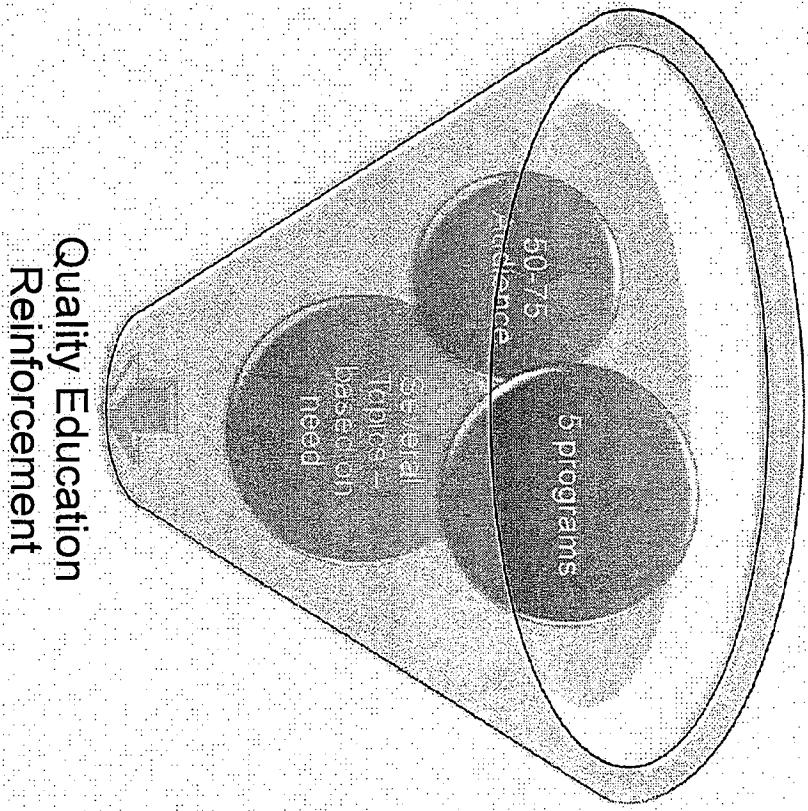
**Includes three components:**

- Secure messaging, guided form-based communication, two-way voice messaging, automated text messaging - manage patients' health passively
- Internet telephony, videoconferencing - manage patients' health in real time
- Remote-monitoring technology for continuous care of chronic disease patients

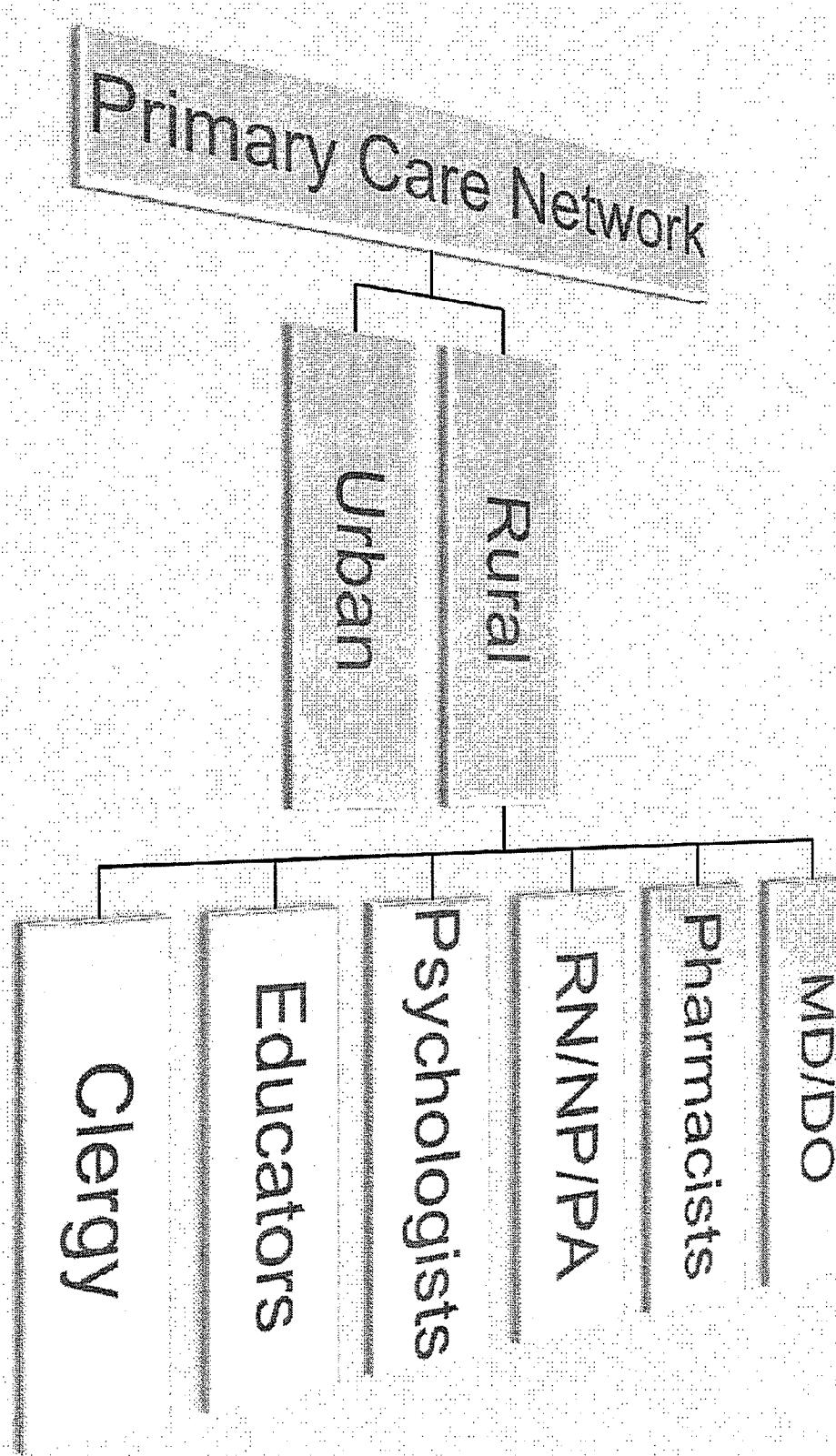
# **Reinforcing and Growing the eMentorU Educational message in Rural KS**

# A dual approach to individualized education

1. The videoconferencing consult between the patient, healthcare professional and mentor
2. Targeted educational Webinars with timely topics that are driven by the informed legislative input



# Creating a Village of Care



# Incentive-based

- Qualified rural doctors selected to participate based on patient population
- Rural doctors do not pay for consultative CME services. They would be sponsored by the state Medicaid funds through a CME credit system for purchasing a consultation
- Giving the Medicaid program added value – turning the Medicaid patient into a practice asset – a source of quality education
- CME earned per mentoring session and webinar could be as much as 15 or more credit hours. Kansas requires all MD/DO's to earn 50 (cat 1 and 2) credits hours a year (preparation and follow-up)
- Supplementary education modules tailored to the rural physician's needs
- No travel costs to patient or provider

# Outcome Measures

Clinicians will be asked to:

- Participate in patient – level outcomes surveys, questionnaires and patient registries
- Rate the effectiveness and satisfaction with educational format
- Advancing care today and reducing cost tomorrow.

# Scope

- Train 50 rural healthcare providers on a single disease state that fits the state's needs
- Give accounts of \$1500 – an expense half of which would be recouped

# **Proven Models of Success**

- **2nd.md**  
Patients connect with doctors via video conferencing for medical advice and information
- **The University of New Mexico's Project ECHO**  
With the use of video conference technology, primary care providers are trained to treat complex disease
- **Binaytara Foundation**  
U.S. physicians connect with physicians in Nepal via video to discuss difficult cases and provide education

Political opportunity for KS to lead America's healthcare future through a novel and scientifically sound program that is both outcomes-based and targeted to improve cost effective healthcare

# **Discussion**

[www.primarycareed.com/kansas](http://www.primarycareed.com/kansas)

For questions or comments email:  
[bhedrick@primarycareed.com](mailto:bhedrick@primarycareed.com)

# Capabilities

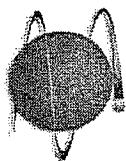
# BANYAN GROUP<sup>TM</sup>

## RESEARCH • CLINIC • EDUCATION

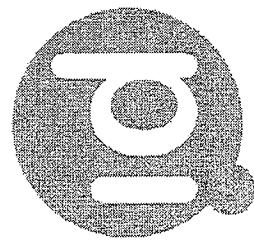
- Clinical care of patients
- Rich heritage of research
- Proven model of conducting research in remote practices
- From research design to statistical analysis
  - We can do it all

**ARE**

primary care education<sup>TM</sup>

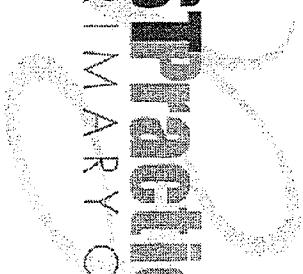


PRIMARY CARE NETWORK<sup>TM</sup>



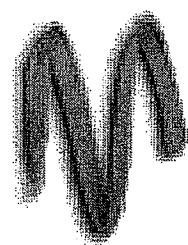
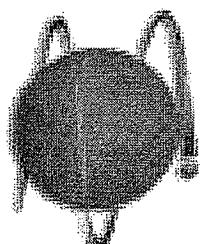
Primary Issues<sup>TM</sup>

**BEST PRACTICES**  
in PRIMARY CARE<sup>®</sup>



# Primary Care Education™

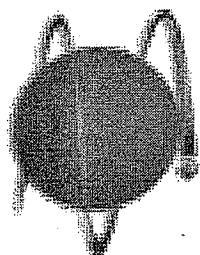
Since 1997, Primary Care Education and Primary Care Network have partnered to bring quality, patient-centered education to primary care audiences across the US through a variety of educational formats and...



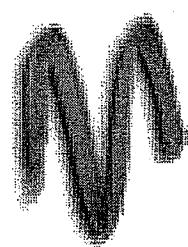
PRIMARY CARE NETWORK™

## Primary Care Education™

... have amassed a direct mail recruitment database of 178,450 primary care providers. Over 55,000 of the providers are opt-in members of Primary Care Network and receive weekly email communications.

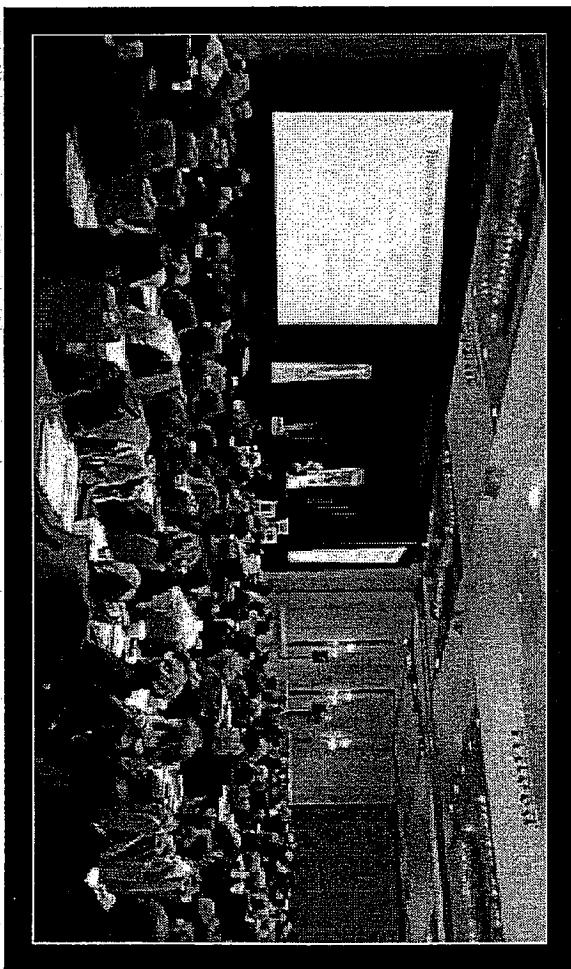


PRIMARY CARE NETWORK™

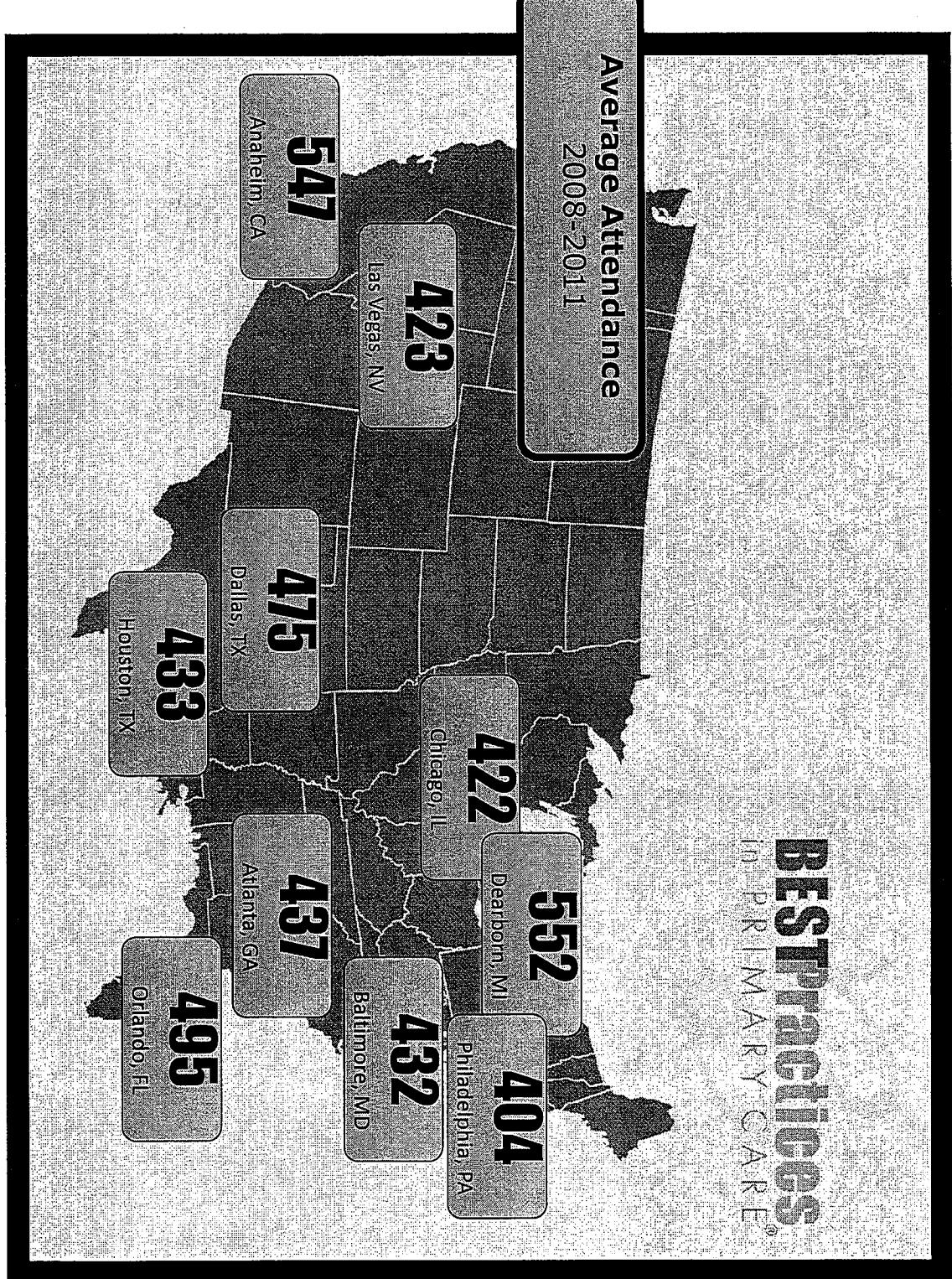




- Since 2003, Primary Care Education has conducted over 100 programs in a 2-day live, multi-topic format
- Each live program features
  - Avg. of 400+ primary care clinicians
  - Sequential learning solutions via Live-to-Online formats
- Case-based presentations via video-cases or "live" standardized patients



# 2012 Locations



# reaching the right learner

- 21 Average number of patients per day
- 4.5 Average days per week in practice
- 401,625 Patent visits impacted weekly
- 425 Average attendees per program

**20,884,500\* Patient visits impacted annually**

\*Based on the anticipated attendance of 2012 activities and 2011 actual demographics.



PRIMARY ISSUES TWO

100

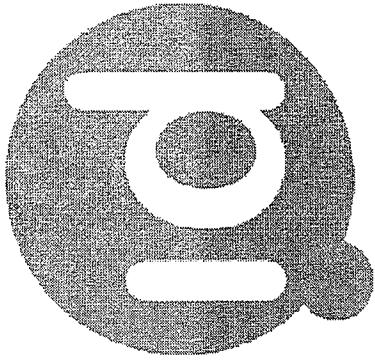
primary issue

**Our Community For Issues  
That Matter in Primary Care**

卷之三



- CME and non-CME articles
  - Marketed to opt-in database of over 140,000 clinicians
  - Anticipate 500 CME certificates; 5,000 views per activity
  - Sequential learning via Live-to-Online formats



## Primary Issues™



Your Community For Issues  
That Matter in Primary Care

Peer-to-Peer. Issues. Insights. Innovations.

Evolving Since 1999

HOME ABOUT CASE STUDIES POINT OF VIEW PRACTICE MANAGEMENT CME NEWS PRACTICE

SEARCH RESULTS  
»

## 2011 YTD Growth

- Visits – 196%
- Unique Visits – 191%
- Page Views – 160%
- New Visitors – 157%
- Return Visit – 271%
- 236% Increase in CME issuance

**ADOLESCENCE**  
Key issues in adolescent  
primary care: Adolescent  
use and abuse, teen smoking,  
teen pregnancy, etc.

**CLEANSING AND PHARMACY**  
From Education Resources of  
Florida, this issue features:  
Pharmacy Benefits Management;  
Healthcare Financing Authority;  
Healthcare Financing Agency;  
and Health Information Systems.

**CHEM AND OBESITY**  
This issue features:  
Obesity in the United States;  
Treatment of obesity; The  
Centers of Medicare and  
Medicaid Services.

**GERIATRIC CARE**  
A special issue featuring:  
Geriatric care; Geriatric  
medicine; and Geriatric  
pharmacy.

**OBSTETRICS**  
Key issues in obstetrics:  
Pregnancy care; Maternal  
use and abuse, teen smoking,  
teen pregnancy, etc.

**PEDS ALLERGY TESTS**  
From the American Academy  
of Allergy, Asthma & Immunology.  
Topics include: Allergy testing  
and treatment; Allergy and  
immunotherapy.

**FAUNAL HYPERSENSITIVITY**  
From the American Academy  
of Allergy, Asthma & Immunology.  
Topics include: Allergy and  
immunotherapy.

**ABDO AND ENTHUSIASM?**  
An interview with Dr. Mark  
Katz, who discusses his  
experience as a primary  
care physician, how family  
physicians can succeed,

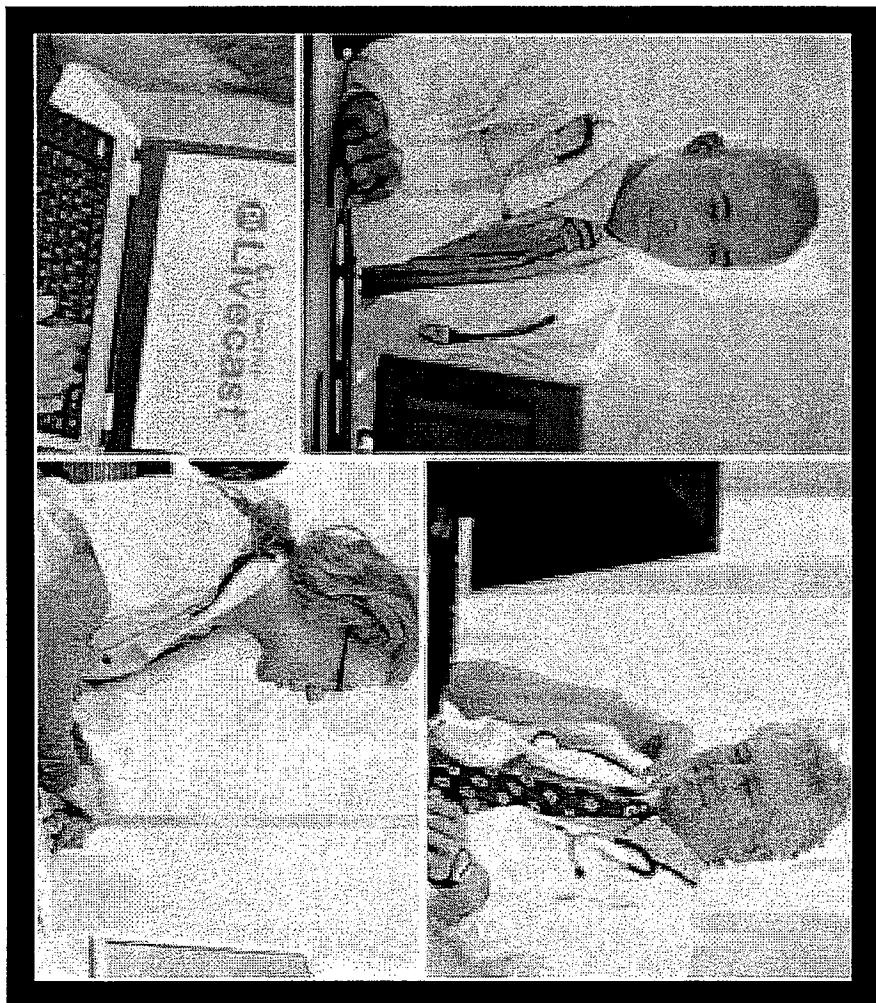
**PROSTATE CANCER TX**  
From the American Academy  
of Allergy, Asthma & Immunology.  
Topics include: Prostate  
cancer; Lymphoma; and  
Prostate cancer screening.

**CDC AND TD**  
Key issues in CDC and TD:  
Treatment guidelines for  
various diseases; and  
CDC guidelines for children.

**OB/GYN GUIDE**  
From the American Academy  
of Allergy, Asthma & Immunology.  
Topics include: Women's  
health; and Women's physical  
activity and exercise.



- Broader reach beyond live activities
- Recruitment can target specific markets or regions
- Up to an hour of education, including Q&A
- Anticipate 125 participants per Webcast
- Sequential learning via Live-to-Online formats



Live Interactive  
Webcast

# Track record of successful distance learning

- Leveraging modern

- web-conferencing

- technology to bring our

- live education to a

- nation-wide audience

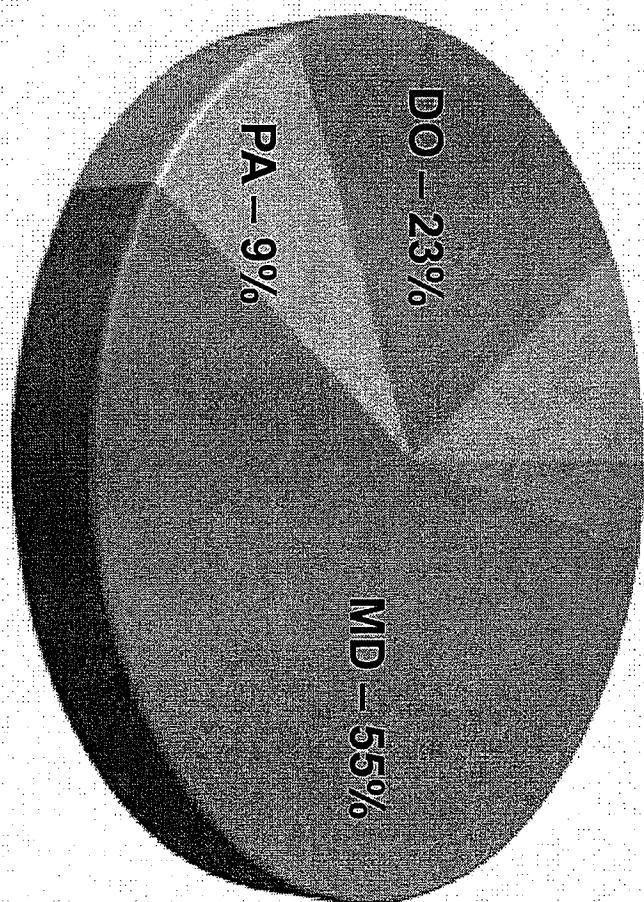
DO - 23%

MD - 55%

PA - 9%

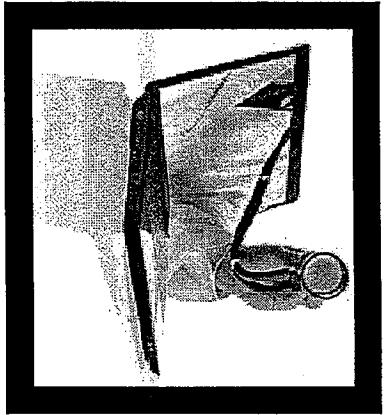
Other - 9% DO - 4%

## Attendee Breakdown By Degree



- 99% of the audience agreed or strongly agreed that the web-based educational was conducive to their learning experience

# Innovative Technology



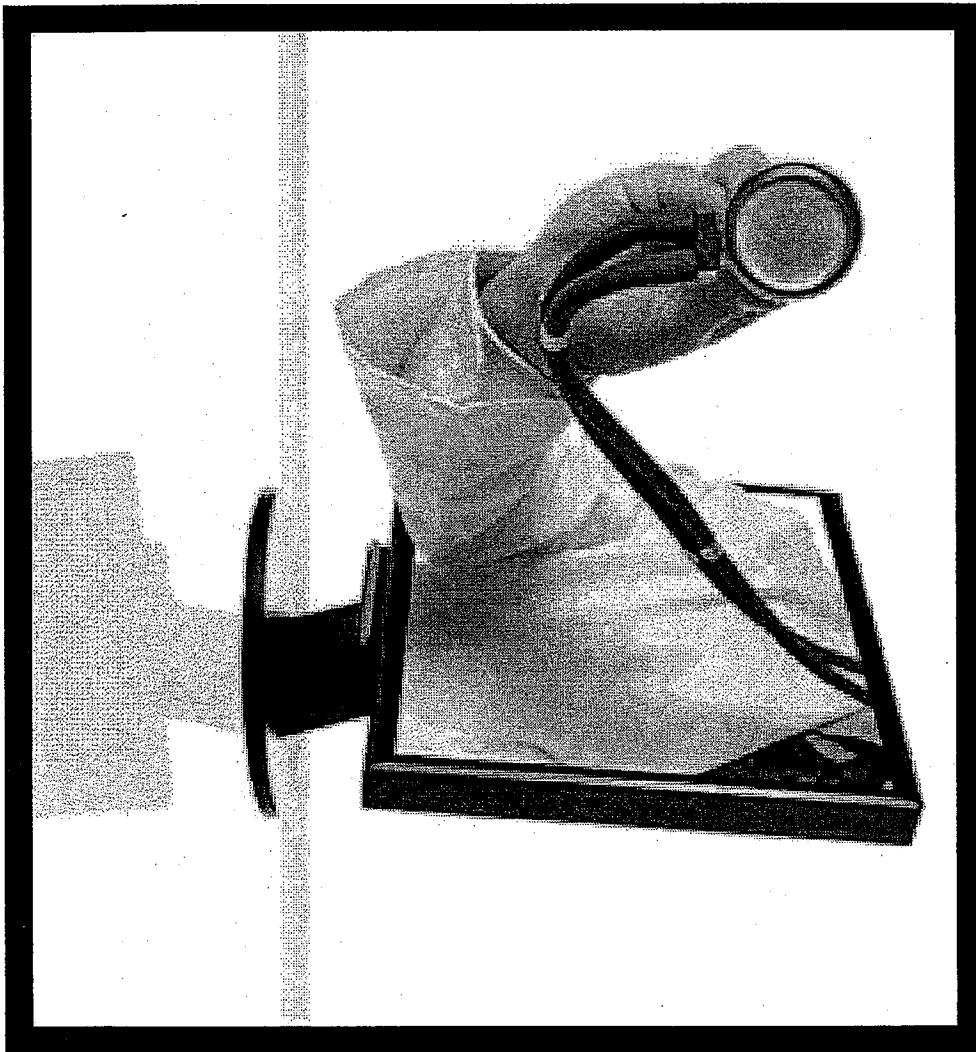
- Hosting a variety of web properties
- Conference technology
- Video production and animation
- Data warehousing
- Strategic partnerships:

  - \* Wellnessa
  - \* life:WIRE
  - \* Personal Health
  - \* Insights (PHI)

The image contains four separate website snippets arranged horizontally. The first snippet is a news article titled "HOT TOXES IN THE NEWS" featuring a photo of a cat. The second snippet is for "HeadacheCareCenter" and includes a "ACCME Accredited" seal. The third snippet is for "Primary Care Network" and also includes a "Primary Care" seal. The fourth snippet is for "clinVest" and includes sections for managing clinical trials and learning about clinical research.

# **Virtual Health Care**

Combining Telehealth eMentoring with  
CME in Rural Medicaid Populations



# Wise Investment

- 50 doctors @ 150 consultations = (\$45k)
- Save in the cost of disease prevention
  - Reduce hospital care and clinic care
  - 30% of a HCP's population obese 3000 patients year
  - 1000 patients would be impacted per HCP
  - Improve outcome of only 100 of those patients would be at a savings of 300k for obesity
- Develop critical skills to help with their patient care and decision making

# Cost Savings Calculation

- 80% of the 50 is 40 HCPs
- $75 \times 5 = 375 + 40 = 415$  HCPs seeing 3000 patient  
1000 which are obese = 41,500 obese pts
- If 10% of those patients got back to normal we would  
be saving 3k a year per patient.  $4150 \times 3000 =$   
 $\$12,450,00$

# Budget

- Recruitment of 50 patients: \$100/head = 5k
- Website development: 75k
- Hosting, upkeep, content updates: 50k
- 50-70K for 3-4 webinars
- Administrative Cost 75K/year
- Total 275,000