Saint Alphonsus

CENTER FOR ADVANCED HEALING

Utilizing TeleHealth to Improve Access To Medical Care in Idaho

September 28, 2009

Tiffany Whitmore, MPA

Po Huang, MD FACEP

How We Started

- Received grant funding for an operating room education project
- Developed critical partnerships within and outside Saint Alphonsus
- Sought additional grant funding for pilot programs
- Developed each program with long-term sustainability as goal

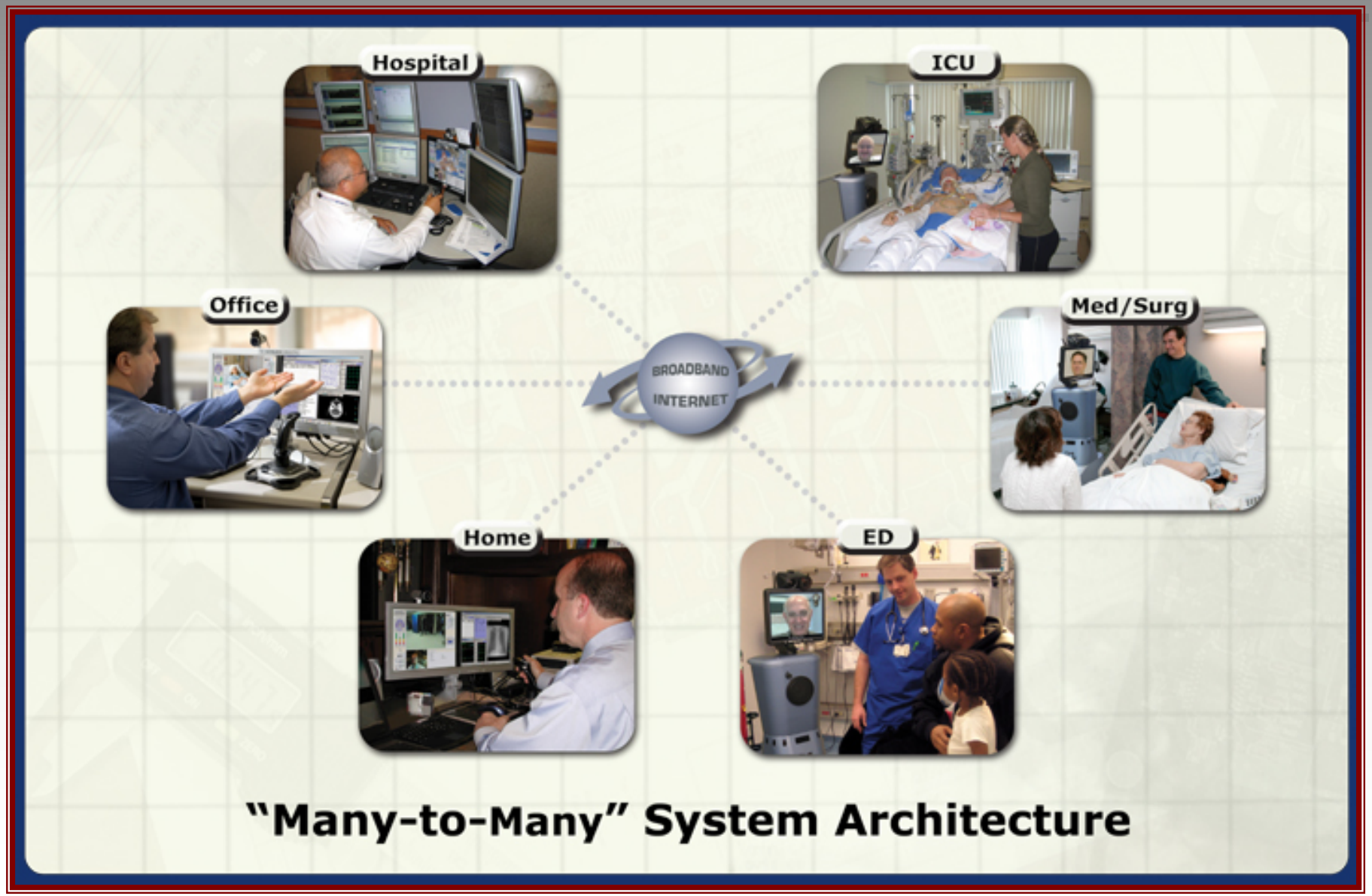
InTouch Health RP-7 Robot

Dr. Stewart Lawrence rounding in the Neonatal Intensive Care Unit

Control Stations

Dr. Renee Bobrowski reviewing a fetal ultrasound

Expertise Anytime, Anywhere

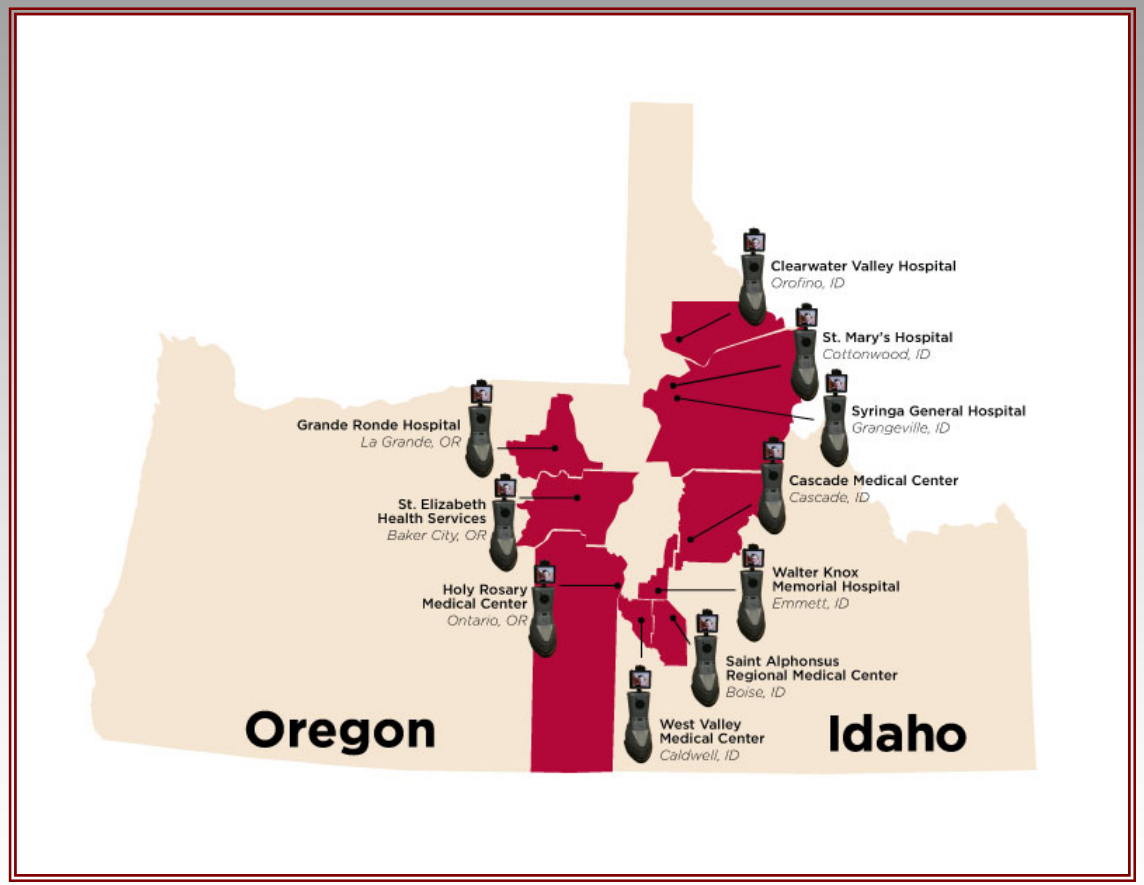


IDA / ORE Network

Existing Remote Presence Sites

Potential Future Sites:

- ➔Jerome, ID
- ➔Burns, OR
- ➔Enterprise, OR
- ➔McCall, ID
- ➔Mountain Home, ID
- ➔Weiser, ID



Remote Presence: Value Proposition

- **Objective**: Enhance service line offerings to network hospitals whereby sub specialty expertise is delivered on-demand or on a predetermined schedule via remote presence robotics.

- **Customer Value Proposition**: Provide customers (patients and healthcare providers) timely access to specialist expertise accelerating delivery of best practice care there by improving:

  - ➔ Quality of care
  - ➔ Quality metrics such as morbidity and mortality
  - ➔ Key financial metrics such as LOS
  - ➔ Operational efficiencies and adherence to best practice standards

Current State: Network Emergency Departments

- Network hospital ED environment:
  - Limited or non-existent specialist support
  - Coverage in many EDs is provided by physician extenders or primary care providers
  - Varied levels of expertise, skill, and resources available in network EDs
  - In time-sensitive emergencies, best practice standards may not be utilized
- 11 out of 26 Critical Access Hospitals (CAHs) in Idaho rely on mid-levels to staff their EDs
- Network hospitals do not have cardiology, neurology, trauma, or many other specialty services on-call

- 55 primary care physicians per 100,000 residents in rural areas, compared with 72 per 100,000 residents in urban areas
- Half as many specialists per 100,000 residents in rural areas compared to urban areas

Source: Fordyce et al. (2007). 2005 physician supply and distribution in rural areas of the United States. Final Report #116.

Current State:
Network Outpatient Services

- Limited visiting clinics in some specialty areas
  - Cardiology services is primary specialty offering
  - Clinics are typically 1 /mo
  - Clinics frequently cancelled in winter months
  - Very limited psychiatry services available in some areas

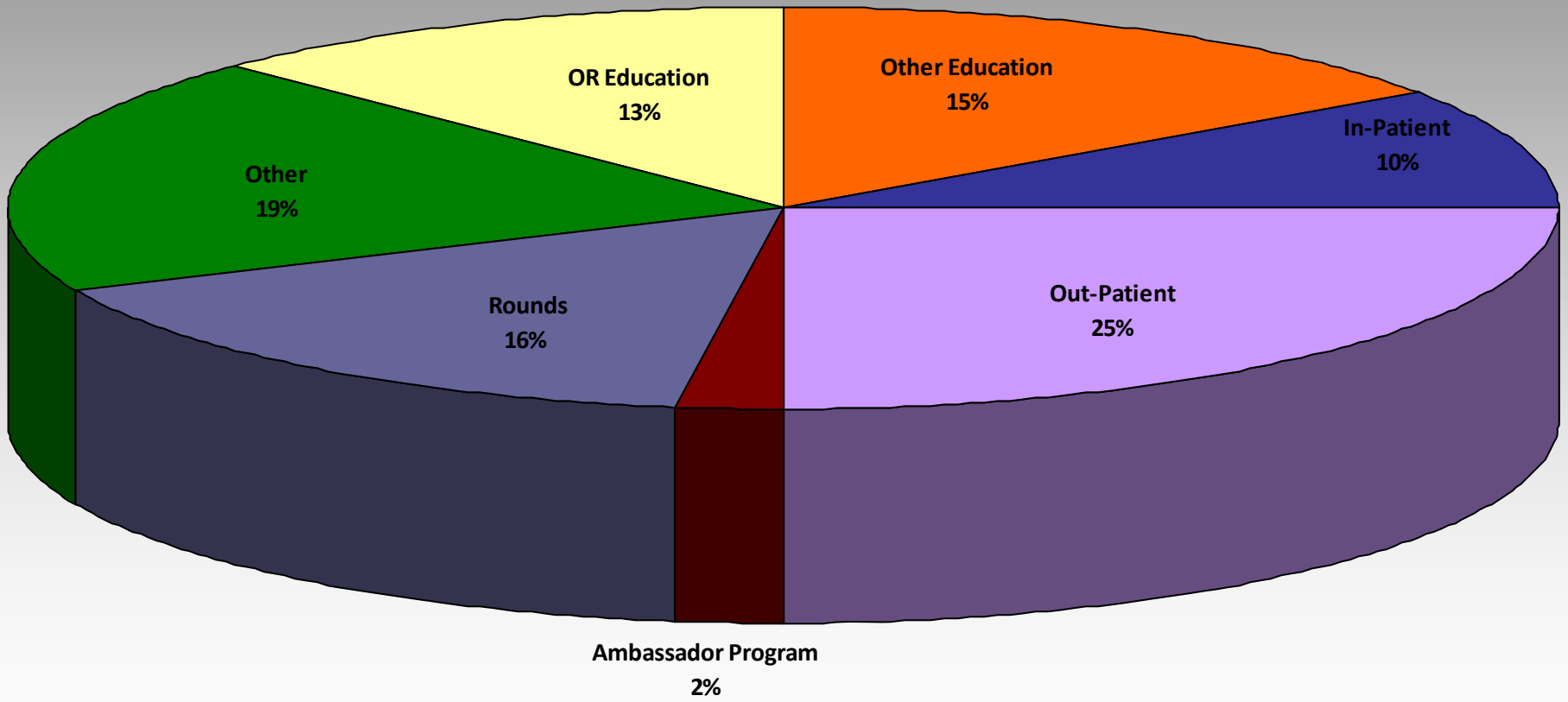
Current Remote Presence Programs

- Interactive Surgery
  - Education on best practices and core competencies for operating room nurses
- Neonatal Intensive Care
  - Neonatologists consultations available 24/7 for assessment of newborns
- Maternal-Fetal Medicine
  - Ultrasound interpretation and consultation for high risk pregnancies
- Ambassador Program
  - Physicians, family, and friends can be remotely present with patients at Saint Alphonsus
- Cardiology
  - Heart failure education
  - Pacemaker adjustments
  - Outpatient follow-up

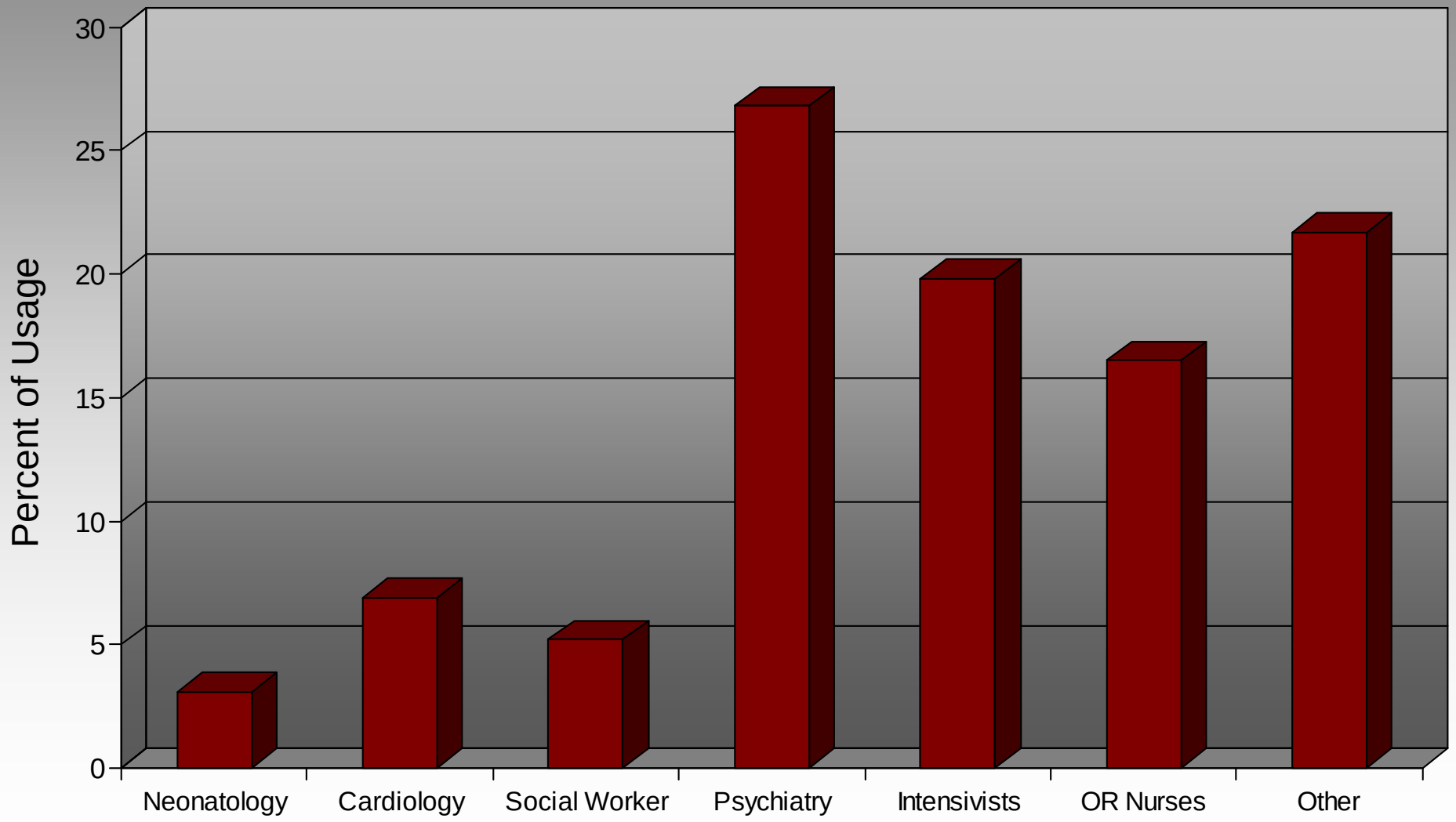
Current Remote Presence Programs

- Intensive Care
  - Intensivist consultation for small hospitals that lack this specialty
- Psychiatric Clinics
  - Provide on-going psychiatric care to patients in remote areas
- Outreach Education
  - Provide education for physicians, nurses, and patients
- Emergency Specialist Program
  - Consults for trauma, sepsis, stroke, and STEMI

RP-7 Utilization (N=1380)



Utilization by Service (N=1413)



Specialty Care at Home

Outpatient Psychiatry Care

- Behavioral Health was identified as the number one community need in the Saint Alphonsus Community Needs Assessment in 2003, 2005, and 2008
- Appropriate psychiatric care has become inaccessible for many of Idaho's residents
- Studies indicate that a lack of mental health services leads to inadequate intervention, prevention and treatment; increased rates of homicide and suicide; and hospitalizations
- Idaho youth suicide rate is more than the national average and suicide is among the top ten causes of death for Ada/Canyon Counties
- People living in rural areas face numerous barriers in obtaining access to behavioral health services: lack of specialists, lack of integration of mental health and primary care, focus on acute care rather than intervention, lack of transportation resources, and the social stigma of mental illness
- Barriers lead to increased emergency department utilization, patients traveling great distances to receive services, and patients going without appropriate care

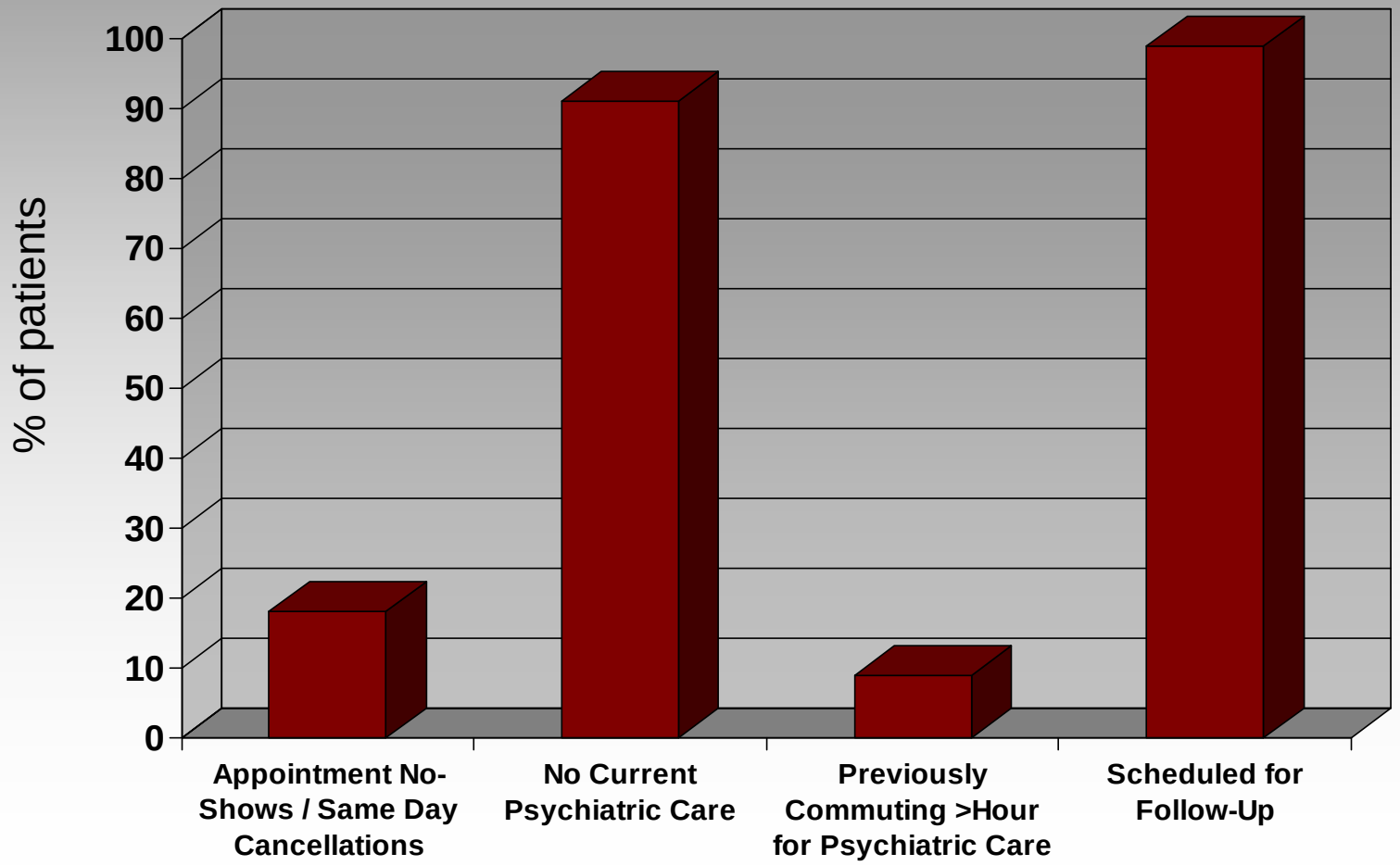
Meeting the Need: Telepsychiatry

- Program went live 7 months ago
- Currently working with Eastern and Northern Idaho regions to create a statewide network
- Psychiatrists with access to technology can serve patient base from anywhere in state
- Block time schedules where 3rd party payors and hospitals share cost

Telepsychiatry Data: Adult

46 ADULTS

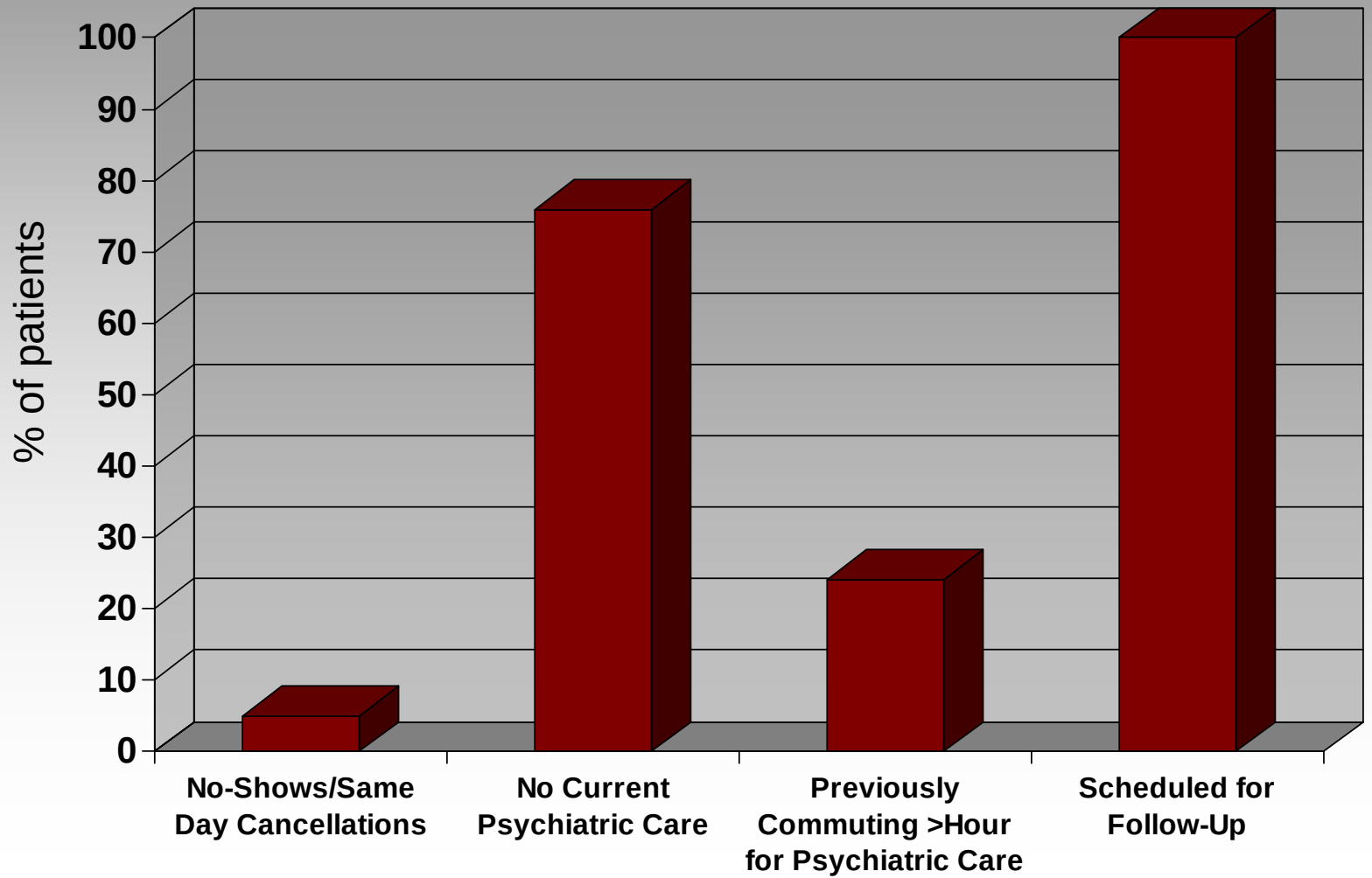
161 Completed Appointments (as of 9-22-09)



Telepsychiatry Data: Child

18 CHILDREN

145 Completed Appointments (as of 9/22/09)



Heart Failure

- Heart Failure (HF) is the single most expensive health care condition for Medicare
- HF costs are estimated to be $28 billion annually
  - Approximately 10% could be saved by improved medical management and patient education
- 12-15 million office visits and over 6 million hospital days per year
- 400,000-700,000 new cases of HF are diagnosed each year
- HF is the most common reason for hospitalization in the elderly
- 44% of HF cases result in readmission to the hospital within six months

Heart Failure Management Program (Go-Live November 13th)

- Model 1: one-on-one appointments with a clinical nurse specialist
- Model 2: group appointments with a clinical nurse specialist
- Both Programs Provide:
  - Education on pathophysiology, symptom recognition and treatment, emergency protocols, promotion of self care, physical assessments, and advanced care planning
  - A nurse specialist who works with referring physicians and provides treatment recommendations as needed
  - A team of cardiologists that is available to support the clinical nurse specialist if/when necessary

Benefits of Remote Presence Programs

- Provides specialty care and expertise to patients in community hospitals
- Patients receive the right care at the right place at the right time
- Provides support to physicians in community hospitals
- Increased opportunities for collaboration and education among hospitals
- Improve quality of care for patients

Quantifiable Benefits

Prevented Transports Year to Date	**15**
Prevented Air Transport Cost Savings	**$354,999**
Patients Served	**184**
People Who Attended Education Seminars Remotely	**237**
On-Going Conferences /Training Sessions Held	**300**

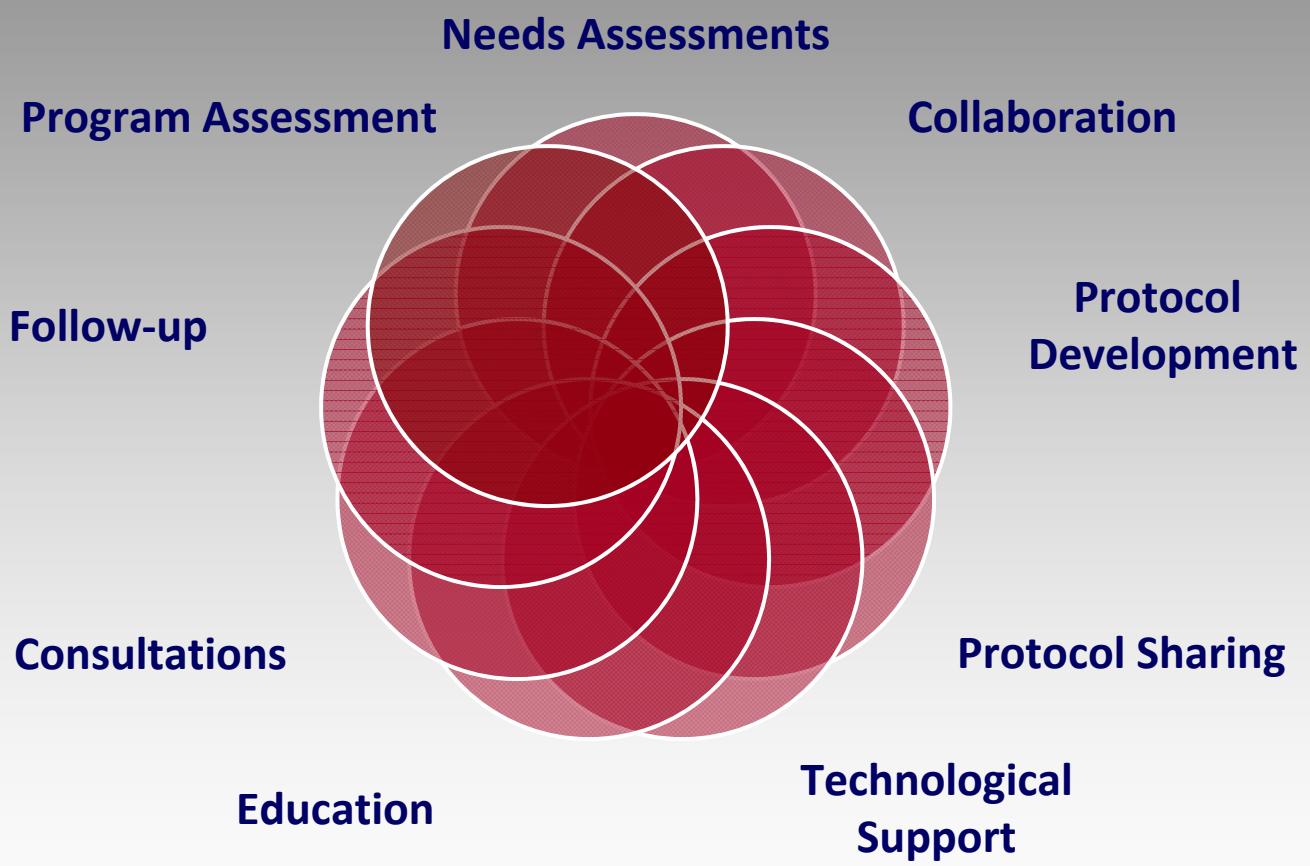
Emergency Specialist Program: GOALS

- Increase rural Critical Access Hospital capacity to assess, diagnose, triage, and treat critically ill and injured patients through case-by-case consult as well as continuing education
- Ensure effective and appropriate patient transfers, supporting rural facilities to admit and treat patients in their home communities whenever possible and ensuring rapid and well-coordinated transport when rural retention is not possible
- Elevate the quality of emergency care delivered in rural communities, increasing positive patient outcomes (as measured through specific clinical indicators)
- Improve patient and family member comfort, satisfaction, and safety by preventing avoidable transfers and readmissions

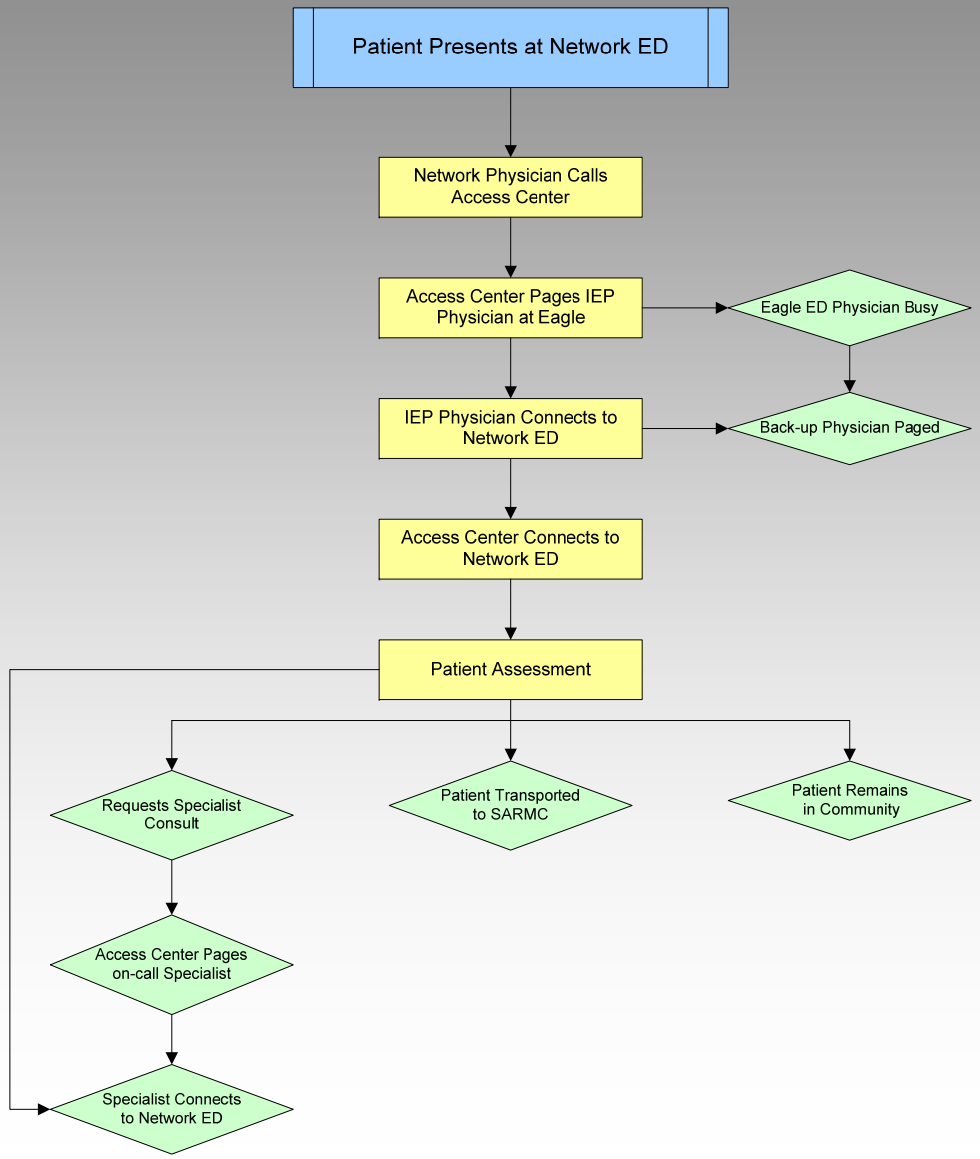
Emergency Specialist Program

- Works in conjunction with the SARMC Access Center
  - Single point of contact for patient consults, referral, transports, and admissions
  - Continuously staffed by registered nurses and Life Flight dispatchers
  - Coordinates requests for consultations, accepts patients, arranges for appropriate transport, and coordinates bed control for the hospital
- Rural providers will have access to board certified emergency department physicians and specialists to assist in assessing and triaging patients
- Healthcare providers have access to a website the provides immediate and up-to-date access to evidence based protocols and training on protocols
- Providers and clinical staff will have access to on-going education opportunities, including Emergency Grand Rounds and Nursing Grand Rounds
- Provides support for rural health care providers by
  - Alleviating barriers to access
  - Improving care coordination
  - Providing emergent and specialty care consultations via state-of-the-art remote presence technologies

Emergency Specialist Program: Key Components



Operations: ESP Process



Online Resources

http://www.saintalphonsus.org/esp/

Username: esp

Password: Access1

Website provides mechanism to share resources with partnering hospitals and prevent unnecessary duplication of work.

2010 Grand Rounds Schedule

- Chad Miller MD, Neurointensivist, Cedar Sanai. Feb 25, 2010. SAH/ICH.
- Lee Garvey MD FACEP, Carolinas Medical Center. April 22, 2010. Chest Pain Center and Chest Pain Work Ups.
- Peter Pons MD FACEP, Former Denver General EMS Director. June 24th, 2010. Mass Casualty Events.
- Carey Chisolm MD FACEP, Chairman ER residency Indianapolis. August 26th, 2010. Wound management.
- TBA: Trauma in Pregnancy / Pregnancy Related Emergencies. October 28th, 2010.