



Development and Implementation of a FEES Program in a Hospital Setting

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Why Did We Pursue FEES?

- To provide a well rounded compliment of dysphagia services.
- Additional means of instrumental assessment when fluoroscopy is not readily available.
- Increasing acuity of medically fragile patients
- Supplement to therapy services

Limitation of Previous Dysphagia Services

- Unreliable findings of blue-dye swallow study
- Medical factors: trach/vent, fatigue, cardiac issues
- Physical factors: obese, SCI, contracture
- Swallow factors: secretion levels, need to visualize larynx
- Availability of radiology suite

Champions of the Process

- Long-term program goal for several years prior to implementation
- New PM&R attending familiar with FEES joined OSUMC in 2005
- PM&R attending persuaded rehab administrator regarding program importance and funding

Proposal to Administration

- Information on indications for FEES provided
- Sales reps demonstrated equipment
- Statistical data provided to justify procedure
- Proposed cost outlined

FEEES FUNDING APPROVED!



Equipment Purchased

- Evaluated multiple scopes for ease of use and quality of image.
- Purchased FEES mini-vision
- Additional components added: monitor and printer
- Additional scope added
- Cart purchased

FEES Planning Committee

- 3 SLP's with advanced dysphagia training
- Team Leader (Manager) with speech background

Planning Process

- Brainstorming Session
 - Identified programmatic and educational components to develop project completion dates
- Developed Project Grid
- Committee members assigned specific program aspect to further investigate and develop
- Original project completion date: January 2007
- Reality May 2007

FEES Project Grid

- Medical Director
- Policy Development
- Competency Development
- Staff Training
- Marketing
- Reimbursement
- Forms Development
- Hospital Credentialing
- Logistics

Explore Physician Support

- Medicare requirement to have physician on site for medical emergencies
- Dodd established Physical Medicine as medical liaison.
- Acute Care suggested Pulmonary be medical liaison.

Policy Development

- Ongoing process that was finalized in May 2007
- Description of purpose and procedure
- Program Utilization
 - Indication for FEES
 - Contraindications for FEES
 - Patient population and criteria
 - Personnel involved in FEES process
 - Utilization of topical anesthetic

Policy cont.

- Referral Process
 - Inpatient referrals
 - Outpatient referrals
- Evaluation Process
 - Case history
 - Bedside clinical exam
 - Preparation for exam
 - Examination procedures for FEES
 - Post examination procedures

Policy cont.

- Emergency Procedures
- FEES and Reimbursement issues
- Infection Control Policy and procedure

Referral Process

- Define criteria for candidates appropriate for FEES study
- External Resources
 - Professional Course
 - Langmore (2001) text
 - ASHA (2001) “Knowledge and Skills of Speech-Language Pathologists Performing Endoscopic Assessment of Swallowing Functions”

Emergency Procedures

- Required to have procedure in place to handle emergencies
- Internal resource: OSUMC hospital policy
- External resource: Langmore (2001)text

FEES and Reimbursement

- Add CPT code 92612
- Assign productivity number to charge for internal data collection
- Internal Resource: Finance

Infection Control

- Compliance with JCAHO, hospital policies, & university policies
- Identification of appropriate space
- External resources
 - Kay-Pentax rep
 - Web-sites for disinfection products
 - Consultation with other programs currently performing FEES

Infection Control cont.

- Internal resources
 - Endoscopy Lab: Investigated use of steris system to reprocess scopes
 - Hospital Safety: detailed information for disposal and clean up of chemicals
 - Epidemiology: assisted with development of infection control policy. Verified final process
 - Central supply/Purchasing: order of products

Infection Control Procedure

- Environmental precautions-well ventilated area
- User precautions-universal precautions
- Pre manual reprocessing prep defined
- Manual reprocessing guidelines
- Chemical disposal
- Chemical storage
- Accidental spill policy

Competency Development

- Technical knowledge
- Demonstration of Skills

Technical Knowledge

- ASHA knowledge and skills for SLP's performing endoscopic assessment of swallowing function (2001)
- Vague outline of suggested training curriculum
- Langmore suggest 10 hours of formal class training
- Hiss (2003) suggests 10-14 hours of formal class training, observation 10-20 FEES, passing 20-50 times under direct supervision of professional privileged in use of flexible endoscopy

Technical Knowledge cont.

- 2 lead clinicians attended 2 day course 2006
- OSU hired independent consultants to provide CEU education course for therapy staff
- SLP staff viewed 2 hour video on FEES
- Content reinforced by website:
www.nature.com/gimo
- Quarterly technical competencies-safety, referrals, infection control

Demonstration of Skills

- OSUMC standards: 5 observations, 25 normal passes, 10 abnormal passes prior to independent practice
- Independent consultant hired to train 3 lead SLP staff
- Remaining staff trained in tiers
- Staff awarded certification letter acknowledging privileges

Demonstration of Skills cont.

- Therapist required to observe & assist procedures on patients they referred
- Training Focus
 - Equipment and materials setup
 - Scope passing
 - Anatomy identification
 - Physiology assessment
 - Bolus observation
 - Compensatory strategy training
 - Positioning challenges (bed vs. chair)
 - Disinfection Process
 - Documentation

Forms Development

- External Resources
 - Evaluated forms from outside facilities
 - Sample forms provided in training course
- Internal Resources
 - Forms Committee/Medical records approval
 - Transition to electronic format

Credentialing/Hospital Compliance

- Determined hospital practice and legal policies
- Developed training program to meet standards

Practice Logistics

- Equipment shared between acute care and inpatient Rehab
 - 1 unit to share among continuum
 - In process of justifying second unit
- Storage of Equipment
 - Storing at inpatient rehab due to space constraints in acute care
- Scheduling
 - Coordination between clinical coordinators for each area.

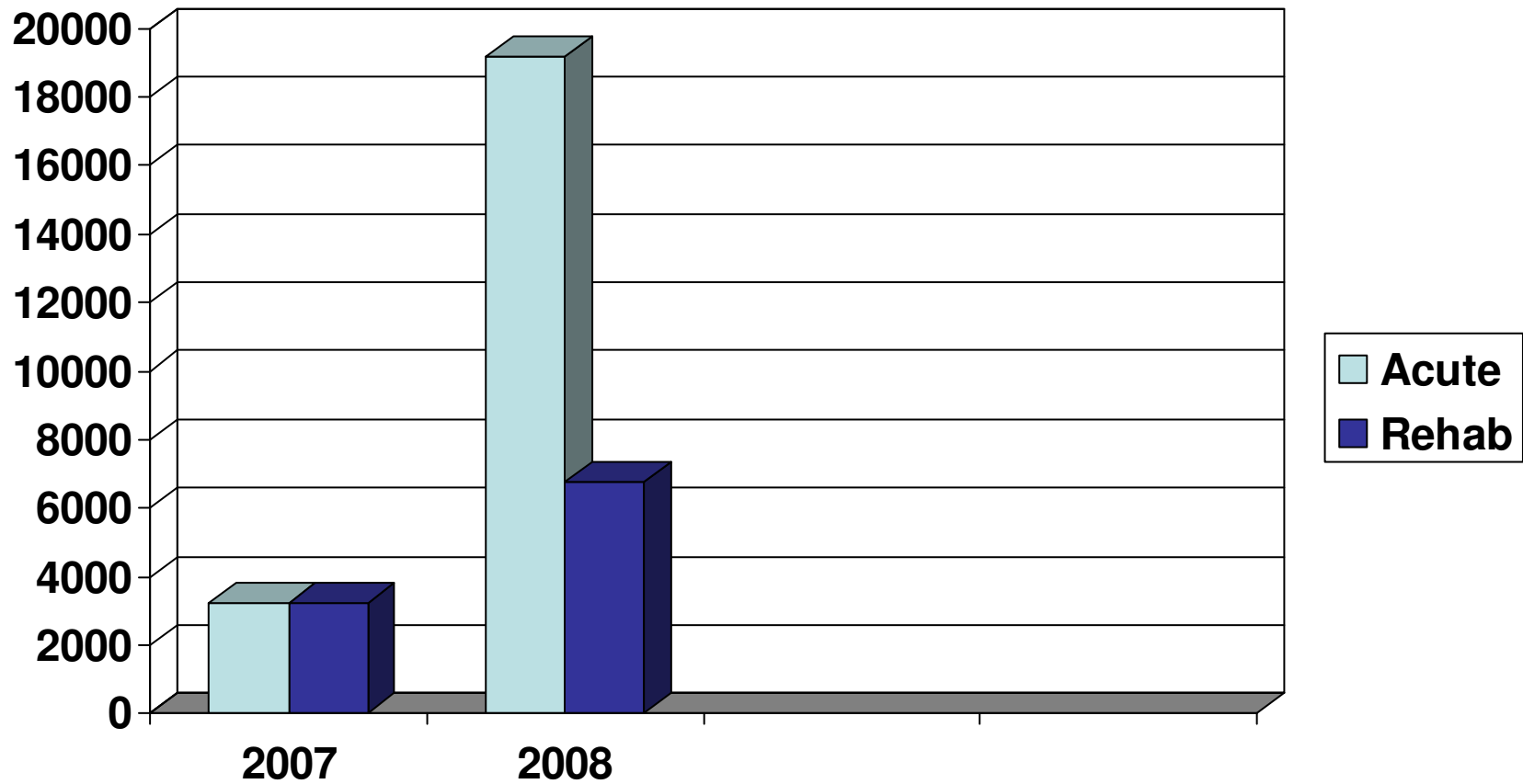
Marketing

- Limited internal and external marketing to date
- In servicing for PM&R physicians and targeted nurse practitioners
- No formal external marketing to date.

February 2008

- 22 FEES assessments from May-July 2007
- 88 FEES assessments from July-January 2008

Revenue Generated



What Have We Learned

- Longer process than originally anticipated
- Internal and External networking is key
- Less expensive over time to purchase larger FEES system
- Competency development guidelines need to be well defined and operational

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