HOW TO START A CONTRAST-ENHANCED ULTRASOUND SERVICE

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NO FINANCIAL DISCLOSURES
GETTING STARTED

1. Set Strategy
2. Survey Environment
3. Identify Opportunity
4. Develop Plan

- What
- Who
- Where
- How
THE WHAT

• US contrast
  • Lumason® [Bracco, Italy] vs. Optison® [GE Healthcare, USA]
• Pharmacy Formulary
  • Lumason® - Cardiology

• CEUS software package
  • Funding
    • Getting approval
    • Teamwork – Peds, IR, US
CPT CODING

- Charge code for Lumason® added to ultrasound
- Med Learn Publishing – 2019 Coverage, Coding, and Resources for Lumason® use
  - Ultrasound, abdominal, contrast – **C76978/76979** (Hospital outpatient prospective payment system)
  - Lumason® with charge code – **Q9950**
    - Charged per mL given; 5 billing units per single use vial (1 kit)
    - e.g. 2 mL dose given
      - Q9950, 2 units
      - Q9950 – JW, 3 units (discarded)
### EPIC ORDERING

<table>
<thead>
<tr>
<th>Name</th>
<th>Code</th>
<th>Type</th>
<th>Pref List</th>
<th>Phase of Care</th>
<th>Resulting Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>US BREAST US, ABSCESS ONLY LT (76642)</td>
<td>IMG50...</td>
<td>Ima...</td>
<td>LL RADIAT...</td>
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<tr>
<td>US BREAST US, ABSCESS ONLY RT (76642)</td>
<td>IMG50...</td>
<td>Ima...</td>
<td>LL RADIAT...</td>
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<tr>
<td>US CE-ABDOMEN (C9744)</td>
<td>IMG51...</td>
<td>Ima...</td>
<td>LL RADIAT...</td>
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<tr>
<td>US CE-VUS VESICOURETERAL REFLUX (C9744)</td>
<td>IMG60...</td>
<td>Ima...</td>
<td>LL RADIAT...</td>
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<tr>
<td>US DIALYSIS ACCESS DOPPLER (93990)</td>
<td>IMG50...</td>
<td>Ima...</td>
<td>LL RADIAT...</td>
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<tr>
<td>US DOPPLER MESENTERIC (93975)</td>
<td>IMG51...</td>
<td>Ima...</td>
<td>LL RADIAT...</td>
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<tr>
<td>US DUPLX ILIACS BILATERAL (93978)</td>
<td>IMG52...</td>
<td>Ima...</td>
<td>LL RADIAT...</td>
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<tr>
<td>US DUPLX LO EXT ARTERY BILAT (93925)</td>
<td>IMG50...</td>
<td>Ima...</td>
<td>LL RADIAT...</td>
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</table>
PACS

- US cine clips
- Network traffic speed/bandwidth
- Wireless
- Heavily used areas → Wired
  - Reduce transfer time-outs
THE WHO

• US tech training
  • Contrast setup - CEVUS
  • Scanning protocol
  • Optimizing contrast US settings
• Fluoroscopy tech training
  • Catheters and catheterization kit
  • Saline bags and IV extension tubing
  • Three-way stop-cock
  • Saline flush
• Resident/attending training
THE WHERE

• Outpatient Logistics
  • IV Placement
    • Who
    • Where
• Foley catheter placement
THE HOW

- Marketing
- Advertising
Pediatric Urology Services

The urologists at Loma Linda University Health are committed to Whole Person Care, recognizing the "personhood" of even the smallest child. Treating the full range of pediatric urology issues is our specialty.

Pediatric Surgery

The pediatric surgeons at Loma Linda University Children's Hospital care for a broad range of surgical disorders ranging from minor lesions managed in the outpatient setting to congenital anomalies, tumors and trauma. The surgeons work closely with other pediatric specialists at the hospital to provide comprehensive care for children including those with the most challenging and complex conditions.

The inpatient clinical services we provide include neonatal surgery, cancer surgery, advanced minimal access surgery, non-cardiac thoracic surgery, pediatric gynecology, biliary surgery, intestinal surgery and the management of chest wall deformities such as pectus excavatum. We also provide a full array of outpatient surgical care for conditions such as hernias, hydroceles, undescended testicles, cyst, ulcers and sub-cutaneous lumps and bumps.

We are supported by an 84-bed neonatal intensive care unit, a 37-bed pediatric intensive care unit, and a 17-bed emergency room, as well as a full complement of pediatric specialists including pediatric anesthesiologists, oncologists, gastroenterologists, cardiologists, nephrologists and emergency medicine specialists.

Have Any Questions?
Call Us: 1-800-625-KIDS
Physician Referral: 1-800-872-1212

PEDIATRIC SURGERY

OUR DOCTORS
HELPFUL LINKS
IDENTIFYING OPPORTUNITY
CEVUS VS VCGU
OTHER APPLICATIONS

SAG BLADDER
CEUS
Mass characterization
Follow-up Trauma Imaging
• First case September 2017
• Increased from ~3 cases/month to ~12 cases/month
• Mostly CEVUS
• Main referrers Peds Urology and Peds Surgery
• Increasing interest by referrers – up to 3 scheduled studies in one day
*Take home message
1. HAVE A GAME PLAN!
2. MARKET AND ADVERTISE!
1. YAY!
2. GULP!
3. NOOO!
4. SIGH!
5. PHEW!
Contrast-Enhanced Ultrasound Task Force

1/12/2018: Click webinar image to learn more and register for the 1/19/18 Webinar:

2/2/2017: Lantheus Medical Imaging Announces FDA Approval of DEFINITY® Label Update

1/11/2017: The FDA removes the contraindication for use of Bracco Diagnostics Inc.’s LUMASON® (sulfur hexafluoride lipid-type A microspheres) for injectable suspension, for intravenous use or intravascular use, in patients with cardiac shunts

1/12/2017: Bracco Diagnostics Inc.’s LUMASON® (sulfur hexafluoride lipid-type A microspheres) for injectable suspension, for intravenous use or intravascular use, receives U.S. Food and Drug Administration approval for use in ultrasonography of the urinary tract in pediatric patients for the evaluation of suspected or known vesicoureteral reflux

4/16/2016: First Approval by U.S. Food and Drug Administration for Contrast Enhanced Ultrasoundography of the Liver

CEUS Task Force

› Roster
› Task Force Objectives

Resources

Agents

Image courtesy of M. Beth McGavall, MD.
THANK YOU!