THE NEW BREED OF CYTOTECHNOLOGISTS
I have nothing to disclose
EXTENDED ROLE OF CYTOTECHNOLOGISTS

1. Screening and interpretation: Gyn, Non-Gyn, FNA
   - Screening IHC
2. FNA Adequacy Assessment: superficial, CT scan, EBUS, EUS
   - Ultrasound assistance
   - Effective communication with clinicians
3. Quality control/assurance
4. Molecular testing: HPV, EGFR
5. FISH: Urovysion
6. Circulating Tumor Cell Testing
7. Grossing
8. Education, as part of the academic team in Pathology Residency & Cytopathology Fellowship
FNA Rapid On-Site Assessment of Adequacy (FNA ROSA) performed by Cytotechnologists

STAKEHOLDERS

- Patients
- Laboratory Professionals
- Laboratory Administrators
- Medical Specialists (Radiology, ENT, Oncology, etc)
- Payers
FNA Rapid On-Site Assessment of Adequacy (FNA ROSA) performed by Cytotechnologists

ADVANTAGES

- Allows appropriate specimen triage
  - IHC, Flow cytometry, Microbiology, Tissue bank for microRNA,
- Reduces cost of patient care
  - Decreases number of unsatisfactory specimens
  - Decreases number of unnecessary surgery
- Improves communication with clinicians
- Allows better collection of clinical history
- *Brings the lab to the patient*
- “It is the right thing to do for the patient”
Results

- The accuracy of on-site adequacy evaluation by Cytotechnologists = 93.2% to 96.5%.
- The number of FNA on-site adequacy evaluation increased annually by 11% on average (2003-2009).
FNA Rapid Onsite Assessment of Adequacy: The Experience of an Academic Institution

Gobara N, Liang L, Wasserman P, Morgenstern N, Sugrue C

North Shore-LIJ Health System

(Poster # 116 - ASC 2011)

Results

- The accuracy of on-site adequacy evaluation by Cytotechnologists = 94.8% to 95.9%
- The number of FNA on-site adequacy evaluation increased cumulatively by 59% (2008-2010) - by 49% for 2011
FNA TEAM @ NSLIJHS Laboratories

From left:
Ryan Brenkert, Xin Ding, Sean McNair, James Rankin, Constantinos Coutsouvelis, Daniel Soto, Karen Chow, Antoinette Lugo
It is evidence-based knowledge that...

Cytotechnologists are highly competent in performing FNA Rapid On-site Assessment of Adequacy
FNA Rapid On-Site Assessment of Adequacy (FNA ROSA) performed by Cytotechnologists

DISADVANTAGES

- Lab productivity loss
- Inadequate service compensation
- Lack of CPT codes for service by Cytotechnologists
DISADVANTAGE

Lab productivity loss

1. Time average for FNA ROSA = 45-60’ (excluding traveling time). Duration influenced by:
   - Specimen types
   - Nature of the lesion
   - Type of procedure (EBUS, EUS, CT scan)
   - Operator experience

2. Time away from screening
Lab productivity loss: example

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>CPT code</th>
<th>Medicare Rate for NY (TC)</th>
<th>Case/hour</th>
<th>Total Reimbursement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pap test (LBP)</td>
<td>88142</td>
<td>$28.51</td>
<td>10</td>
<td>$285.10</td>
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<tr>
<td>Pap test (w/Imaging)</td>
<td>88175</td>
<td>$35.06</td>
<td>10</td>
<td>$350.60</td>
</tr>
<tr>
<td>Urine (LBP)</td>
<td>88112</td>
<td>$59.07</td>
<td>9</td>
<td>$531.63</td>
</tr>
<tr>
<td>FNA</td>
<td>88173</td>
<td>$88.60</td>
<td>2.5</td>
<td>$221.50</td>
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</tbody>
</table>

Average per hour $347.21

Average lab reimbursement for 1 hour Cytotechnologist screening work = $347.21
Lab productivity loss: example cont.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Loss of screening productivity</td>
<td>($ 347.21)</td>
</tr>
<tr>
<td>FNA reimbursement (CPT 88173)</td>
<td>$ 165.19</td>
</tr>
<tr>
<td><strong>Lab productivity loss for 1 FNA ROSA performed by Cytotechnologists</strong></td>
<td>($ 182.02)</td>
</tr>
<tr>
<td><strong>Lab productivity loss for 7 FNAs ROSA/day</strong></td>
<td>($1,274.12)</td>
</tr>
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</table>
**DISADVANTAGE:**
Inadequate service compensation

<table>
<thead>
<tr>
<th>CPT code</th>
<th>Medicare Rate for NY (TC)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>88172TC</td>
<td>$10</td>
<td>Supplies</td>
</tr>
<tr>
<td>88177</td>
<td>N/A</td>
<td>Each additional evaluation episode</td>
</tr>
</tbody>
</table>
Additional considerations: Reduced lab reimbursement in near future

- Do more with less
  - Improve efficiency
  - Increase financial performance
  - Expand quality measures, decrease TAT
- Challenges in shifting Cytotechnologists’ billable to non-billable services
- *Do the right thing for the patient*

What options do we have?
- New ways to apply technology
- New ways of looking at multidisciplinary collaborations
- New ways for continuing to provide value to the patients and to the lab

**Business as usual is not an alternative**
Option 1: Adoption of Telepathology

- Increasingly implemented for direct patient care

- 2007 CAP – General Checklist
  - Primary diagnosis
  - Frozen sections diagnosis
  - Formal second-opinion consultations

- 2010 CAP - Anatomic Pathology Checklist added Digital Image Analysis section
  - DNA, Morphometric analysis, FISH

- FNA on-site adequacy assessment
  - Absence of specific regulation and practical guidelines
  - Validation required for the intended use
  - Initial capital expense
  - Dependent on 2 operators
Telepathology validation at NSLIJHS Laboratories
Option 2: Conversation with Medical Specialists

- Can we share the responsibility of hiring a Cytotechnologist?

  CYTOPATHOLOGY

  Provide:
  - Training
  - Competence
  - Performance Appraisal
  - Continuing Education

  MEDICAL SPECIALISTS (i.e. RADIOLOGY)

  Provide:
  - Salary & Benefit
Option 3:
Propose a **new CPT code** for FNA ROSA performed by Cytotechnologists

- CTs have enormously expanded the scope of service in the last decade & acquired highly specialized skills
- Master - Cytotechnology programs
- Shortage of Pathologists in the US
  - Delegation of routine work to Cytotechnologists and Pathology Assistants
Propose a new CPT code for FNA ROSA performed by Cytotechnologists cont.

- Accepting the reimbursement system as immutable is not in the profession best interest
- Changes in AMA recommendation and CMS approval will require hard work
- When Pathologists and Cytotechnologists work as team ➔ better outcome ➔ better patient care
- As professional organization, we should become the agent of change.
New model for FNA rapid on-site Assessment of Adequacy by Cytotechnologists

- Brings the lab to the patient
- Adds value to the lab
- Maintains lab presence in the patient-centered team
- Creates an institutional logic

THANK YOU
References

- Gupta PK. Progression from on-site to point-of-care fine needle aspiration service: Opportunities and challenges. *CytoJournal.* 2010; 7:6
- Dhillon I, Pitman MB, DeMay RM, Archuletta P, Shidham V. Compensation crisis related to the onsite adequacy evaluation during FNA procedure. Urgent proactive input from Cytopathology community is crucial to establish appropriate reimbursement for CPT code 88172 (or its new counterpart if introduced in the future). *CytoJournal* 2010; 7:23
- Al-Abbadi MA, Bloom LI, Fateree LA, Haack LA, Minokowitz G, Wilbur DC, Austin MR. Adequate reimbursement is crucial to support cost-effective rapid on-site Cytopathology evaluations. *CytoJournal* 2010; 7:22