Choosing Wisely® Recommendation Analysis: Prioritizing Opportunities for Reducing Inappropriate Care

PAP TESTING

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PAP TESTING IN WOMEN 30-65 YEARS OF AGE

Evidence Justification

The American College of Obstetricians and Gynecologists recommends against the routine annual cervical cytology screening (Pap tests) in women aged 30 to 65. We summarize the reasoning provided by this society to justify the inclusion of this service, including assignment of this service into one of five evidentiary categories of "wasteful" services arising from the evidence on benefits, risks, and costs (Gliwa, 2014).

American College of Obstetricians and Gynecologists

Don't perform routine annual cervical cytology screening (Pap tests) in women 30-65 years of age.

Specialty Society Rationale

Current guidelines recommend Pap tests every three to five years in women aged 30-65 years without risk factors for developing cancer such as genetic markers or family history (Saslow, 2012). For these women, there is no advantage to having annual exams versus exams every three years, as similar numbers of cancers are found (American College of Obstetricians and Gynecologists, 2012). Annual Pap tests may cause more anxiety for women, and there are increased chances for unnecessary follow-up testing for false positive results, including repeat Pap test and colposcopies, which can cause discomfort and bleeding (Saslow, 2012).

Table 1. "Wasteful Care" Evidence Category

1. Insufficient evidence to evaluate comparative benefit for any indication
2. Insufficient evidence to evaluate comparative benefit for use beyond the boundaries of established indications, frequency, intensity, or dosage
3. *Adequate evidence demonstrating equivalent benefit with higher risk, higher cost, or both*
4. Adequate evidence demonstrating a small comparative benefit not large enough to justify the higher risk to patients, higher cost, or both
5. Adequate evidence demonstrating improved comparative benefit, lower risk, lower cost, or both when using the intervention

Source: Gliwa and Pearson, 2014

Current Use and Variation in Practice

- *Estimated Population Affected: 32,700,000 – 45,800,000*
- *Excess Cost of Practice: $2.6 million – $7.3 million*

Data from the U.S. Census indicate that there are approximately 72.8 million women in the target age range for cervical cytology screening via Pap smear. An analysis of screening patterns among 8,000 women at UCLA Medical Center suggested that 45% were receiving Pap smears at intervals <3 years without clinical indication (Almeida, 2013), a rate which would equate to 32.7 million women in the U.S. ICER commissioned an analysis of Pap utilization from a 10 million-person dataset of employees of self-insured companies nationwide (Truven Health MarketScan® Research Databases, 2013). In this dataset, repeat Pap testing without a clinical indication within 30 months is very prevalent, occurring among 63% of screened women (which would equate to approximately 45.8 million women nationwide).

The costs of too-frequent Pap testing have not been well-studied, but include both unnecessary repeat Pap testing and follow-up care for subsequent false-positive findings, including colposcopy. Pap test costs have been reported to range from $40-$80 (Costhelper.com, 2013), and colposcopy costs range from $200-$400 (Costhelper.com, 2013). Based on current estimates for false-positive rates for Pap tests (20%) (Arbyn, 2008) and rates of unnecessary colposcopy (4 per 1000 screened) (Mathias, 2012), the excess cost per false-positive screen may range from $80-$160, or $2.6 million – $7.3 million for the entire screening eligible population.

Sociology of Practice

We conducted unstructured interviews with national clinical and policy experts representing the fields of obstetrics and gynecology and family practice to understand the multi-faceted influences that drive the use of this service and to gather diverse opinions on the most effective methods to reduce inappropriate use of these services.

Experts were mixed in their responses to whether or not annual Pap tests are overused in practice. Some OB/GYNs and family doctors sensed that the revised guidelines on Pap tests are generally accepted by the physician and patient communities, whereas others observed annual Pap tests remain a common practice. When describing potential factors contributing to overuse, experts highlighted patient demand and a lack of patient education on the risks of over screening. Family doctors and OB/GYNs alike find it difficult to reverse the message that patients need a Pap test every year when this contradicts what women have been consistently told over the past decade. Many patients, particularly those that are especially cancer-phobic, often push back, noting that they would rather be screened than potentially miss cervical cancer. Other physicians noted a general cultural suspicion from patients that physicians are withholding care when they are denied an annual Pap test, though this is less of an issue in practices where patients have a longstanding history with their physician. Clinicians also highlighted that insurer reimbursement for annual Pap testing and requirements from the Affordable Care Act that Pap tests are provided without co-payment have reinforced patient demand for annual testing.

To help address issues of patient demand, regional experts cited the need for clear communication and education strategies that articulate the risks of overtreatment and over screening. Experts agreed that education strategies should also target medical assistants, nurse practitioners, and other clinicians that spend more time with patients. Many practices cited the lack of publicly available resources and tools that help women understand what to reasonably expect from screening and how they can be harmed by false-positive test results. Some physicians felt that framing the message about annual Pap testing in relation to advances in HPV screening has been helpful. For example, physicians recommended articulating to patients that the Pap test is not particularly accurate, which is why experts once thought it needed to be performed annually, but that performing a Pap with the HPV screening test offsets the need to test as often. We identified no formal programs for reducing overuse and variation of annual Pap testing in women between ages 30 and 65 in our interviews with experts. However, Consumer Reports®, in partnership with the ABIM Foundation as part of the Choosing Wisely®

campaign, has created a range of consumer resources to help frame patient conversations about unnecessary Pap testing.

Experts noted that Pap tests are likely used unnecessarily because the risks of overuse seem relatively insignificant, both to patients and physicians. Moreover, since annual pelvic exams are still recommended, Pap tests are often automatically scheduled or easy to tack on during the visit. Clinicians also noted a general reluctance among OB/GYNs to reduce annual Pap testing since it is seen as a way to motivate patients to attend their annual women's health visit. There is a fear among some OB/GYNs that without annual Pap testing they will lose consistent patient contact and may end up missing something important or lose the opportunity to discuss with women other reproductive, menopausal, or bladder health concerns. Financial incentives may also be at play here, since patients would be less likely to maintain annual OB/GYN visits without the perceived need for a Pap test. Clinical experts also highlighted that clinical guidelines on Pap test frequency have changed multiple times in the past decade, making it difficult for physicians to keep abreast of the standard of care, and contributing to patient confusion.

For practices with transient patient populations, managing multiple-year screening intervals has been difficult or infeasible in some cases. It is sometimes impossible for physicians to know if patients who frequently move or change practices are up to date on screening. Without further information on screening history, physicians tend to screen these patients annually to avoid missing something potentially important. The implementation of electronic medical records (EMR) is designed to make it easier to manage screening intervals, but some practices have noted that information is not always appropriately transferred to the medical record, making it difficult to find patient history even in practices with electronic records. Clinical experts suggested that presenting clinicians with how many tests they perform relative to their peers would be welcomed and effective in reducing regional variation. They sensed that clinicians want to know when they are not in step with standards, but that payer-led initiatives like pay-for-performance strategies can often put physicians on the defensive and make them less receptive to messaging about their individual performance.

Experts we spoke with believed that growing use of global payment and other reimbursement mechanisms that move away from fee-for-service will help improve the chances of reducing the overuse of Pap tests. Regional and national insurers are also optimistic that the roll-out of ICD-10 coding will make it possible for them to identify when more frequent Pap tests are performed

without a clinical indication and make it easier to recognize outliers. We identified no formal insurer-led initiatives to reduce unnecessary Pap testing.

Summary Statement: Drivers of Overuse and Opportunities for Improvement

Based on our research and conversations with national experts, this section synthesizes the major factors related to overuse, as well as any opportunities for improvement or existing best practices for reducing wasteful care.

<table>
<tr><th colspan="3">Factors Related to Overuse</th></tr>
<tr><th>Patient Factors</th><th>Physician Factors</th><th>Payer Factors</th></tr>
<tr>
<td>• Patient demand
• Financial incentives (i.e. no co-payments for Pap tests under ACA)</td>
<td>• Reluctance from clinicians to stop performing Pap tests when it is what gets women to attend their annual visit
• Difficulty of changing behavior of clinicians trained to perform annual Pap tests
• Automatic scheduling of annual pelvic exams
• Lacking knowledge of current standards due to history of conflicting guidelines and recommendations over the past 10 years
• Transient patient populations making it difficult to track long-term screening history</td>
<td>• Administrative challenge for payers to distinguish when Pap tests are medically necessary</td>
</tr>
<tr><th colspan="3">Opportunities for Improvement/Current Best Practices</th></tr>
<tr><th>Opportunities for Improvement</th><th colspan="2">Current Best Practices</th></tr>
<tr>
<td>• Establish clear communication strategy with patients to explain changed guidelines
• Educate patients on the risks of over testing
• Maintain consistent clinical guidelines
• Use ICD-10 roll-out to recognize when Pap tests are unnecessary, and identify outliers for targeted campaigns
• Provide information to clinicians on how often they screen relative to their peers
• Revise medical policies so that repeat Pap tests are only covered before 30 months if certain clinical indications are present
• Educate medical assistants and other clinicians who have more one-on-one time with patients on how to discuss changed guidelines
• Make use of global payments that reduce incentives for clinicians to perform extra tests</td>
<td colspan="2">• Simple patient messaging displayed in physician offices that reinforce idea that patients no longer need an annual test</td>
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Summary Rating

This section synthesizes the information provided previously and presents a recommended priority ranking of whether this service is likely to represent the best opportunity for policy makers to improve practice and drive change. These rankings are based on considerations of 5 factors illustrated in the table below.

Criteria	*Ranking*
Level of overuse	★ = Limited overuse ★★ = Moderate overuse ★★★ = Substantial overuse
Magnitude of individual patient harm	★ = Limited harm ★★ = Moderate harm ★★★ = Substantial harm
Ease of overcoming patient, clinician, and system barriers to reduce inappropriate care	★ = Limited ease ★★ = Moderate ease ★★★ = Substantial ease
Potential to leverage existing change programs and policy efforts	★ = Limited potential ★★ = Moderate potential ★★★ = Substantial potential
Amount of potential savings	★ = Limited savings ★★ = Moderate savings ★★★ = Substantial savings

Category	*Score*	*Rationale*
Level of overuse	★★★	• Large proportion of women estimated to receive annual or bi-annual Pap tests
Magnitude of individual patient harm	★	• Potential harms from false positive results relatively insignificant
Ease of overcoming patient, clinician, and system barriers to reduce inappropriate care	★★	• Difficult to monitor using existing coding systems, but potential for opportunities with ICD-10 and improved patient/clinician education
Opportunity to leverage existing change programs and policy efforts	★★	• Availability of some patient resources, but no existing change programs identified at either the national or regional level
Amount of potential savings	★★★	• Low cost per case but large eligible screening population creates significant opportunity for savings

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