

Episode 67: High Value Care

On this episode: Dr. Jed Wolpaw and Dr. Pam Johnson

In this episode, episode 67, I welcome Dr. [Pam Johnson](#) to the show. Dr. Johnson is a radiologist here at Hopkins who has taken an interest in high value care initiatives. She and I discuss what this means and how people can get involved in reducing unnecessary testing and improving the quality of the care we deliver to patients.

Table of Contents

Hyperlinks to section of notes.

[High Value Care](#)
[Necessity](#)
[Successful Aspects of Quality](#)
[Improvement](#)
[Solution to Litigious Society](#)
[Choosing Wisely Campaign](#)
[Costs & Practice](#)
[Barriers](#)
[Financial Incentives](#)
[EMR](#)

What is “high value care”?

- *High quality care at low cost*
- Defining “cost” can be challenging. Our perspective is cost of care for patient. Improve quality and safety in ways that eliminate unnecessary cost for patient. This is more than just financial cost, which can include personal cost, such as radiation exposure, day off of work, anxiety, etc.
- Beyond tests and treatments. It’s improving efficiencies such as reducing length of stay and improving discharge transition so not readmitted.
- Highest financial burden is ED visit and hospitalizations.

High quality care at low costs

How do we know what’s necessary vs not?

- Don’t have all the answers yet. Lots of work to improve practice and finding best way to implement quality improvement.
- All patients historically received chest x-ray every day. Now we know better. Education is key part of whole process.
 - o [Surgeons at Cedars-Sinai](#) reduced inpatient labs in the SICU were reduced.
 - o [2018 JAMA-IM](#): Reduced blood transfusions with feedback reports. Mapped transfusions and posted it on wall. Now method used for pulmonary CTA in ED, giving ordering providers feedback on positive results relative to mean. Powerful especially when combined with education and clinical support.

2018 JAMA-IM: Campaign to reduce blood transfusions. Posters, popups, “Why choose 2 when 1 will do?” Restrictive threshold of 7, or 8 with coronary art disease is good. Downsides with each additional unit!

What makes quality improvement projects more successful?

- Multimodal education
 - o From the [SICU paper](#), multimodal education reduced blood gasses, CBC, BMP, chest x-rays, coagulation studies all by significant percentages and without worse outcomes. Also saved over \$700k/year.
 - o Residents from other medical schools, attendings, everyone susceptible to older practice despite new evidence for less transfusion. Very hard to change so need education!
- Evaluate outcomes based on guidelines and evidence-based recommendations.
 - o [2015 NEJM study](#) published data showing data for preoperative tests before cataract surgery varied hugely by provider but didn't affect outcome. This led to less preop tests but some providers still order full gamut, which can be problematic.
- Multidisciplinary education
 - o During rounds at Hopkins ICU, review frequent labs with nurses. Does the patient need it q4? Can it be q6 or q12? This is one way to educate house staff and engage in a team setting. Should be multidisciplinary! Pharmacists are immensely helpful (Need PPI? Antibiotics?)!
 - o Check each patient and discuss labs can reduce ABG use. Can use pulse ox! Do a clinical exam! Doesn't happen unless you make a conscious effort on rounds to ask these questions. Do we really need an ABG? What do you want from CBC? Can you just order hemoglobin?
- Engage residents!
- Checklists
 - o Used in the [SICU paper](#).
 - o More successful with multiple interventions.
 - o Used in IR for procedure preparation.
 - o Used in radiology for clinical decision support and education, tailored to setting (inpatient vs outpatient).

What do you say to people who practice defensive medicine in face of a litigious society?

- Understandable but solution is for all of us to band together. With [High Value Practice Academic Alliance](#) we publish safety outcomes to show that this is the right thing to do, thus allaying some of these fears. We're encouraging practice to follow evidence
- Nobody wants to miss a pulmonary embolism, but now we're finding tiny ones and patients get anticoagulated which lead to massive hemorrhage. We recognize this and find evidence to support changes in practice.

What is the [Choosing Wisely](#) Campaign?

- American Board of Internal Medicine created a campaign to target 5 areas of practice to reduce or remove unnecessary procedures. Tremendous engagement. Hundreds of recommendations.
- Examples:
 - o Imaging (lumbar spine, daily chest in unit, not order pulmonary CTA for low risk, when to use coronary CTA)
 - o Lab tests (CKMB – not test of choice for ACS!)
- Website also for patients for shared decision making.
- Starting point for QI project!
- Engage in multidisciplinary collaboration.

Need an idea for a QI project? [Start here](#)

[Learn more](#) while earning CME credit

How do costs affect practice?

- Example: Four days ago, patient had CT and normal labs. Now has AKI → order renal ultrasound to make sure not retention. We think that u/s is completely inconsequential. No radiation, not thinking about costs. Seems like no harm, but 99% of renal ultrasound is normal...
- Is it more cost effective to just order that or the whole CBC? There may be a difference. It may be worthwhile to educate actual costs!
- [Dr. Lenny Feldman in 2013](#) put up some costs on EMR, which led to a modest decrease in orders. Benefits could depend on setting, such as benefit of knowing cost of 2 similar drugs.
- Anecdotally, putting costs of anesthesia reduced use of more costly remifentanyl and sufentanyl.
- American College of Radiology created [R-SCAN](#) to help reduce unnecessary imaging and lower costs. Mapped out blueprint to reduce routine chest x-ray in ICU with team approach of radiology and critical care.

What are some barriers to high quality care?

- Litigation
- Resistant to change
- Need time, eg hospital needs to finance program that reduces revenue
- Conference last year: biggest barrier was unable to get leadership to invest

How can we use financial incentives?

- CMS already have quality reimbursement metrics, which mandates ordering providers to consult clinical decision support tool when ordering CT, MR, or nuclear medicine on outpatient or ED patients. Tightly regulated where if tool not used, radiology won't be reimbursed.
- Desire quality, not financial, incentives. Need to set benchmarks ourselves, rather than relying on insurance or outside organizations mandates.

Is the EMR helpful in this?

- EMR should be carefully designed to not disenfranchise patients who could benefit from test.
 - Education is key. Can take many forms. Screensavers, pictures at workstation, online modules, CME course.
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What are you doing to improve delivery of high value care at your institution? Are you involved? Suggestions?

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