Geriatric Surgery Verification
American College of Surgeons

GSV Insight: Inpatient Medication Management

Marcia Russell, MD, FACS – Professor of Surgery, David Geffen School of Medicine, UCLA

INTRODUCTION

Michael Bencur [00:00:10] Hello and welcome to GSV Insight. Today let's talk about inpatient medication management. My name is Michael Bencur, and I'm the GSV Project Manager. Today I'm joined by Dr. Marcia Russell, Professor of Surgery at David Geffen School of Medicine at UCLA. Welcome, Dr. Russell.

Marcia Russell, MD [00:00:27] Thanks so much, Michael, for having me join.

Michael Bencur [00:00:30] Could you tell us a little bit about yourself and your background, especially with your role within the GSV Program and its development?

Marcia Russell, MD [00:00:38] Yes, definitely. I was lucky enough to be involved with the GSV Program from the very beginning. I was part of the core development team for the Coalition for Quality in Geriatric Surgery, which started in 2015 and ultimately led to the GSV Program, which launched in 2019. And I am currently the Vice-Chair for the Committee on Geriatric Surgery Verification.

Michael Bencur [00:01:02] Great, thank you.

QUESTION #1

Michael Bencur [00:01:04] Moving on to our questions about Standard 5.11, Inpatient Medication Management, what tools or templates in your hospital's EMR can and should be utilized for inpatient medication management? What are some low hanging fruit and, conversely, what are some ideal situations to aim for?

Marcia Russell, MD [00:01:23] Great question, Michael. The hospital EMR is a really powerful tool that we can use to help us with medication management. One area of low hanging fruit is to look at order sets that your surgery team is currently using and look for potentially inappropriate meds for older adults and remove those. The Beers Criteria is a lengthy list of potentially inappropriate medications for older adults. Some of these are more relevant and commonly used in the surgery population. Examples of things that are commonly used in the surgery space would be things like diphenhydramine or Benadryl that can be used for itching on a PCA order set or sometimes used for sleep. Other common medications that should be avoided would be things like Phenergan for nausea and vomiting, benzodiazepines, Demerol, this is commonly used in the PACU for shivering and sedative hypnotics like zolpidem, which can be used for sleep. So, one first pass would be looking at your order sets and pulling out these medications and using more favorable medications for older adults. Some EMRs can also do alerts, for example, when a medication is ordered. So, you could pick the top five or 10 most commonly ordered inappropriate medications in the surgery space and have an alert pop up. And in some instances, you could also suggest a substitution or even have pharmacy auto substitute some medications. So, for example, if you know Benadryl was ordered for sleep, you could substitute that with something like melatonin, or if Benadryl was used for itching, you could substitute something like that with Cetirizine. And those would be more advanced ways to use the EMR to manage some of the medications. One other thing I want to mention is

just the tie-in to pain management. And so also looking at pain management order sets to make sure that the doses of opioids are appropriate for older adults. And we're also using non-opioid medications like Tylenol or non-steroidals as well as non-pharmacologic interventions, like ice packs, heating packs, et cetera.

QUESTION #2

Michael Bencur [00:04:01] Definitely. And I'm glad that you tied in Standard 5.12, Opioid-Sparing, Multimodality Pain Management. The pharmacy team obviously plays a huge role in this. How do you most effectively utilize that team and what are some strategies for engaging your pharmacy?

Marcia Russell, MD [00:04:19] So, I do think it's super important to engage pharmacy as a stakeholder and there's lots of opportunities to include them. So, for example, in the preoperative interdisciplinary conference, pharmacy could be included in that conference, and medication review and comments about medication adjustments could be made as part of that discussion. Similarly, they could also be included in the interdisciplinary rounds and perhaps medication review by pharmacy is one of the items that is discussed on a daily basis to review potentially inappropriate medications or dosage adjustments. Pharmacy can also definitely provide input on how to best use the EMR, like we previously discussed, to make substitutions or provide alerts. And then finally, I think depending on pharmacy's bandwidth, they can be engaged in a process of medication review on admission to the hospital for older adults potentially throughout the hospital stay; obviously daily is ideal, but that may not be feasible. So, perhaps they were reviewed every other day or every three days. And then finally, we are routinely doing medication reconciliation at discharge and having pharmacy's input on the medications with a perspective on what's safe for an older adult is another touchpoint where they could be engaged.

QUESTION #3

Michael Bencur [00:05:58] Great. And education is also obviously a key component. What education should be given to providers and the care team to ensure consistent medication management?

Marcia Russell, MD [00:06:10] Yeah, education is definitely a really important component here for all providers, nurses, physicians, our interns and residents and our advanced practice providers. And part of it is just making them aware of some of the downstream effects that particular medication choices can have for older adults. And particularly I am thinking about medications that can trigger postoperative delirium. And we know that postoperative delirium has other downstream effects like prolonged length of stay, association with other complications, and need for post-acute care. So, I think just raising awareness that ordering Benadryl for a vulnerable older adult, if that is what triggers their episode of postoperative delirium and causes this other cascade of events, we can really make important changes by not giving that medication. So, I think first is just a real awareness of how important the medication management and avoiding certain medications are in older adults. Second, I think is just an awareness to the Beers Criteria and that this list of medications exists that are potentially inappropriate for older adults. I think one of the problems with the Beers Criteria is that it is an extremely long list of medications and you do really have to kind of filter through it to see what's relevant to surgery. And there is some work going on in that space to identify the Beers medications that are most commonly used by different surgery specialties. So, I think we will be able to provide some more detailed education about that moving forward, but just bringing awareness that this list exists, and if we're not sure, we can check this list of Beers medications and make sure we're not inappropriately prescribing something for our vulnerable older adults. Another area is this overlap with pain management and so using as little opioids as possible because those medications can trigger delirium, but uncontrolled pain can also trigger delirium too. So, there is a fine balance. And so just really raising the awareness about the interrelationship between medications, pain control, and

downstream events like postoperative delirium will really go a long way towards improving our care for older adults.

CLOSING REMARKS

Michael Bencur [00:08:45] Absolutely. Well, thank you so much Dr. Russell for being here today and talking to us about Standard 5.11, Inpatient Medication Management.

Marcia Russell, MD [00:08:55] Thanks very much, Michael, and I'm happy to have folks reach out to me with additional questions or concerns.

Michael Bencur [00:09:00] Thank you. And Dr. Russell's contact information is up on the screen if you'd like to reach out with any follow-up questions. And then I hope you all have learned as much as I have today. If you would like to share your GSV implementation strategies, please don't hesitate to reach out to me at mbencur@facs.org. Thank you.