Moderator: So we have our last presenter who is Kristina Cordasco. She’s with the VA Greater Los Angeles HSR & D Center for Study of Healthcare Innovation and Implementation and Policy. She’ll be presenting on the ED PACT tool, communicating Veterans’ care needs after emergency department visits via electronic messages.

Kristina Cordasco: Hi. Good morning. I’d like to start with thanking my collaborators, without which this project would certainly have never happened. So communication failures between providers are a threat to patient safety. And the post ED period is vulnerable to communication failures.

So two thirds of patients discharged from emergency departments do not receive the recommended post-ED care. And it was our objective to improve communication between the VA Greater Los Angeles Emergency Department and the VA Greater Los Angeles PACT teams.

And to develop and pilot and formatively evaluate an electronic medical record based tool to support communication of care needs of patients discharged from VA emergency departments. And we did this by something we called the ED PACT tool.

So what is the ED PACT tool? Well, it’s essentially a message from the emergency department providers to the PACT RN care manager. And it alerts the RN care managers about patients’ specific or urgent follow up care needs. And it uses an order mechanism in a CPRS to the PACT RNs and we’re calling this a care coordination order.

So to graphically depict what I just said, the message goes from the emergency department provider to the RN care manager. Who then works with the rest of the PACT team and the PACT neighborhood to deliver the care need. So this is a process that’s initiated with the ED provider filling in the ED after care instructions note.

This is part of the workflow within the emergency department. This was a very important implementation feature, that the tool be in the workflow of the ED. So as the patient is being discharged, they fill in the note. This is obviously just a snapshot where the ED provider clicks a button to say whether the post follow up care need is nonurgent.

And that the patient should follow up as previously scheduled with the primary care team. Or if there is an urgent need. If the button for an urgent need is pushed, the option, then the ED PACT tool window automatically pops up at the conclusion of the note being signed.

So the order screen pops up and the first screen is here on the left. The first thing that the ED provider does is select the clinic site to which the patient is assigned. They know that without knowing anything about our healthcare system, which was also a really important implementation feature. We have a lot of part time ED attendings who work in multiple healthcare systems. And we have a lot of trainees who rotate through multiple healthcare systems. So they don’t really understand where our physical locations are.

So they simply need to match up the wording here with the wording that is shown here in the orange box. It would be helpful if the orange box was really there on CPRS, but it’s not. But here it matches up. So they select the site. So this would be a West LA VAMCWLA, which is our abbreviation for the West LA clinic of the West LA VAMC. Again, who would really know that?

But if you just match up the words and then that this is a goal team four. So the next selection is here of which of the teams within our West LA site does the patient belong to. Then the ED provider fills in a templated order, which is just a few steps. As part of our implementation process, we found that a lot of our patients do not have reliable phone numbers or the phone number in CPRS is not correct.

So they first indicate information about the patient’s current phone number and then a simple checkbox about the reason for request. Whether it’s a symptom or sign recheck, blood pressure recheck, wound care, suture removal, laboratory recheck, radiology follow up or reimaging, coordination of follow up care with consultants or specialized testing, or medication adjustments.

And then free text about the detail of the need. The RN care manager receives a notification, which is an information alert that there is a new order for one of the patients assigned to his or her team. And then opens the order to read the message. The message is embedded within the order. The RN care manager then works with the PACT team to address the need.

And writes a very focused note about what was done in response to the need. Then finally, the RN changes the status of the order from active to complete. Therefore, signaling back into the system that the baton has been passed. The message has been delivered. So using closed loop communication principles.

So our development of this tool, we formulated a multi-disciplinary work group of both emergency department and PACT providers, including the nurses, clerks, and clinical applications coordinator. This was a key feature to the success of our project was forming this workgroup that worked together to first discuss what the issues were on both sides of the ED and PACT communication divide.

And then develop this tool together and then we used PDSA cycles to develop and refine the ED PACT tool. We engaged stakeholders and performed readiness assessments. Which included ED provider leadership meetings and then at each of our clinic’s sites, PACT provider and RN leadership meetings.

We performed in person trainings of the PACT RN that were interactive and case based and we built the tool for 15 of our greater Los Angeles clinics. And launched initially at one clinic and then one clinic at a time, we rolled it out across greater Los Angeles. And we performed audit and feedback to ensure and monitor adherence with newly established practices.

As part of our formative evaluation, we monitored rates of adherence overall and by clinic. And during the audit and feedback, obtained the feedback back to us, then to our RNs, about barriers. So when there was a problem with the process, what went wrong? And then post implementation, we did PACT clinic leadership interviews.

So our results. So this tool was initially launched in quarter one of fiscal year 16 and this is the number of uses across the two fiscal years to date. So a steady increase. Of total, this has been used for follow up care needs for 3,686 Veteran encounters in our emergency department. And the most common reason, a little over half of the reason, is symptom and sign recheck.

But the other indications are being used as well. So this is our results from our audit and feedback. So the percent of orders with no clinical action after three days. So the instructions to the nurses that the order needs to be changed from active to complete. Receiving, signaling initiation of the care need.

So the care need does not need to be complete when the complete is signaled. We very specifically instruct that if there was a got it button, that the PACT team has got the care need, this would be what the button is. So their percent of no clinical action after those three days, you can see that we’re hovering at about ten percent.

But 90% of the time, there has been a clinical action and at three days, we prompt the RN to say that there has not been any action. And to prompt them to follow up, made for those remaining ten percent. So reasons, we call these overdue orders. Reasons for these overdue orders that the nurses have given to us are technical.

If the notifications were sent to the wrong team because remember, the ED is manually choosing which team. The RNs click on the notifications and they disappear. These are informational alerts and so they sometimes just disappear. Or if an RN accidentally clicks on them. The RN, the biggest other reason is the nurse is on leave.

So if they haven’t assigned a surrogate or even more commonly, they have assigned a surrogate. So the notifications are getting forwarded, but the surrogate is covering multiple teams and therefore, just feels too overwhelmed. The nurse’s CPRS profile is not setup to receive the orders. So this has been an issue when nurses turn over or there are floater RNs, having to manually go in and maintain these orders.

And then the patient is admitted to the hospital or is in the domiciliary, so the ED orders should not have actually been used. So our qualitative assessments, we elicited feedback from stakeholders as I mentioned, both PACT leaders and providers. Also, ED providers as well as Veterans.

We did that through in person meetings and group and individual feedback from the nurses in the PACTs, ad hoc feedback from ED providers, and we interviewed nine Veterans. The domains that we covered and these were overall impressions, suggestions for improving ED PACT tool or its implementation.

The key players in the implementation, the Veteran care experience with the transition, and issues to consider for sustaining the tool at greater Los Angeles. And what we found was that the tool reduces ED providers’ uncertainty about how and if Veterans will get needed ED follow up care. And it helps the PACT clinic manage their workflow.

And it reduces their walk-ins and provides care more efficiently to the Veteran. And RN care managers really appreciate being included in the communication loop. So Veterans receiving the indicated care reported good experiences in obtaining that care. And that it was very Veteran friendly, that the clinic reached out to them about their care need.

We did have some challenges. Technical, again the notification disappearing if the RN clicks on it and errors related to the ED providers misdirecting the orders. And then the organizational and staffing challenges and difficulties when staff were on leave or even more difficult, the nurse, actually a vacancy in the PACT staffing.

So in summary, the ED PACT tool is useful in facilitating communication for urgent or specific post emergency department follow up care. It addresses a key patient safety vulnerability. And sending messages from the ED to PACT via the nurse care manager is feasible and useful. But further technologic development of the tool would improve the tool’s value.

So next steps. We are applying for operations funding and recruiting collaborators to support testing of spread to other VA facilities. Feel free to volunteer. And we’ll be further evaluating implementation outcomes. We’re having ongoing engagement with VA informatics community regarding technologic development and integration into our new electronic medical record.

And then we’re applying for research funding to assess impact on clinical and Veteran experience outcomes. I really want to end by thanking my funders for this work. The initial quality improvement work group that I said was so essential to the success was funded by the VISN 22 Veterans Assessment and Improvement Laboratory, which we fondly call VAIL.

It was a PACT demonstration lab or is a PACT demonstration lab funded by the office of VA primary care. And then this tool development spread and evaluation has been funded as part of the Quary [PH] care coordination program project. And I’d be happy to take any questions or comments you might have.

Unidentified Female: Thank you. This is really interesting. I was curious just about some of the nuts and bolts of the ED docs experience in filling this out. Specifically, I was curious if that’s a checkbox option or if they each have to select one in the options. You showed that the majority are sort of a generic follow up care and then some are the other.

Kristina Cordasco: Right. They just have to select one. One or more.

Unidentified Female: They can do one or more?

Kristina Cordasco: One or more. Right. So they can select as many, it’s check all that apply. They do need to, have to check one. One of our interesting experiences early on is we did not have any of the fields required. And some of our interns were just submitting completely blank orders.

Unidentified Female: Do they tend to then also cut and paste text below explaining? Or is the nurse’s job then to go and look at a completed ED note to figure out what’s actually needed?

Kristina Cordasco: So they have to write something in the text box and many are filled in by our interns and residents. And I wish I could say it was the most complete thing possible or clear. It’s not always. So the nurse, in our training, we do talk about referring to the ED note in hopes that the text at least gives them a hint of what the care need is. Thanks.

Donna Washington: Donna Washington from VA greater Los Angeles. I’ve heard about the ED PACT tool sort of in the periphery in the halls but great talk. So one thing I’m surprised is one of the reasons for the delay is the RN care manager not being able to reach the patient.

Even with a phone number, often the phone number in CPRS just doesn’t work. So I wonder if you had the ability to look at that and then if so, if you’re able to link that with patient characteristics?

Kristina Cordasco: So the most common reason to not be able to reach the patient is in our homeless or vulnerably housed population. And actually, one of the options I went through very quickly about the phone number was yes, no, and patient does not have a phone number is also one of the options. Our homeless, we have a homeless clinic, an HPACT clinic.

And those nurses still report that they find the ED PACT tool very valuable. So even if the patient ends up walking in, then at least when they walk in, they already know what Mr. Jones wants or needs. Rather than figuring it out retrospectively. So that doesn’t answer your question as well, but even when they are not able to get in touch with the patient by telephone, the PACT clinic appreciates having received the message. So that when the patient does show up, they know what the need is.

Donna Washington: Thanks.

Marty Charns: I’m Marty Charns and I’m always a skeptic about implementation. So take that…so I’m going to give you two checkboxes. Either this is so obviously a help to the RN care managers that the implementation was very straightforward. Or it was obviously a help to some people and the ones that were involved in the QI implementation were really supportive.

And then there’s the challenge of how do you spread it to other clinics and other RN care managers? So which was it and if it was box number two, can you tell us a little bit about the secret sauce that got things effectively spread? So that you reached a 90% utilization level.

Kristina Cordasco: Right. So great question. So I have to say, the nurses, once they started using it, they really liked, appreciated it. We do occasionally get like I don’t have time for that. But overall, when we go back to the nurses, they tell us how much they rather would receive the message than not receive the message.

Because what they really dislike is the patient walking in at 3:45 on a Friday saying what their care need is and that they didn’t expect it. So the nurses in the PACT team really love this tool. And the ED really loves the tool too. So it really just met a need on both sides.

Having said that, I can’t say implementation was easy. It was very, it’s been very labor intensive in that we really needed to get over a lot of initial hurdles. Where people were very skeptical. People were very skeptical that the nurses would be okay getting these messages. The nurses themselves were very okay.

Well, what if I get messages I don’t know what to do with? And then they realized that these were just like all the other messages they get directly from the patients. So they’re like oh, we can do this. So getting over that hurdle to get them to use it has been quite a big endeavor.

So to answer your question about the secret sauce, it’s taken a lot of in person time. I’ve been to every clinic in our greater Los Angeles area at least twice. Some of them three times, at this point, personally. I’ve spent a lot of time on our fine freeway and that is not…which got a lot of feedback about the tool and its development.

So I don’t think that was wasted time. It’s just not spreadable. So you can’t do that at every single healthcare system. So what we’re looking at is that if we learn the lessons about the messaging that really ended up working. Can we message around the tool proactively?

Doing virtual or recorded trainings and spread it that way. And that would be the next step for the project is testing that spread. But I’ll keep you updated on how that goes.

Moderator: I think we have time for one last question and maybe a minute or two for any other questions for the rest of the panel.

Mike Davis: So hi. Mike Davis from the office of Veterans access to care and primary care provider. And just two comments from my brain. One is as a primary care provider, I can tell you that receiving a message about what’s needed is so much better than trying to review and see which one of my patients hit the emergency room.

And then go review the chart and figure out what’s going on. It seems to me that this is an obvious win/win for everybody involved. So that’s comment number one. So I think it’s a great project. Comment number two from my perspective is why don’t you just implement it nationally? I mean, get on the call for the group practice managers. Present it as at least a best practice.

See who’s interested. There’s cacks [PH] around the system. We have a national cack now in our office that could help people answer questions about how to set this up. I’ll bet if you take a project like this and sell it to a program office like ours, we could help accelerate.

Kristina Cordasco: I will be following up with you very quickly.

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