**VISTA Surgery Package and Management of the OR and NORA Schedules.**

At the present time, the anesthesia service manages OR and NORA schedules by placing all cases in the VISTA Surgery Package (VSP). We have been using this system for more than 15 years. There are many reasons why we use the VSP for all cases (OR and NORA). Anesthesia resources are fungible, if they are used to care for a patient in the OR, they can’t be assigned to a NORA cases. If they are providing care for NORA cases, they can’t be assigned to handle an OR case. We handle 8 to 12 simultaneous anesthetizing locations a day. One third of our cases are NORA cases. We need a system to handle work assignments and the VSP is how we do it. Many systems look at cases scheduled in the VSP for information. If a case isn’t in the VSP, those systems won’t work. We document OR and NORA as well as ICU and PACU care in PICIS. If a case isn’t in the VSP, PICIS won’t identify the people involved, case type, start and stop times, allergies, ASA, etc. Protoviewer is used to manage resources, track case starts, staff availability, case ending, etc. Protoviewer only displays cases in VSP. If a case is not in VSP, Protoviewer will not display it. It simplifies many, many systems to have all cases (OR and NORA) in VSP.

**Definitions:**

1. **Vista Surgery Package** (VSP): Program for scheduling and documenting surgical cases. We use it for sceduling NORA cases as well.
2. **OR Cases**: Cases done in the OR (OR 1-8 and MPR-2)
3. **NORA Cases:** Non OR Cases: Cases done in GI, PACU, ICU, MRI, CT, Psychiatry, Radiology, Cardiology, etc.
4. **PICIS:** Computerized Anesthesia Record Keeping (ARK) and Computerized Information System (CIS) used in OR, NORA, PACU, and ICU to document anesthesia and nursing (PACU & ICU) care. Continuous black box recording every 30 seconds of OR, ICU, and PACU monitors.
5. **ProtoViewer:** Software designed and developed at SF VAMC to display cases scheduled in Vista Surgery Package. Protoviewer does not have an independent database; it simply displays what is in VSP. Cases are not entered in Protoviewer. Protoviewer is a display only program that displays what is scheduled in Vista Surgery Package. Protoviewer allows us to manage resources, track case completion, and manage the OR.
6. **Anesthesia Workload**. Anesthesia workload is calculated in a complex way. If a case is done in the OR, the workload is calculated using times in the VSP. Those times can be completed by the OR nurse or by PICIS sending an HL7 message to the Databridge to the VSP to complete the time entries. If any of the times are missing, there is no workload. In 2016 for example, we got zero credit for OR cases because they changed the requirements for counting a case. It used to be that time was counted from wheels in to wheels out in the OR. 15 minutes was added to each end of a case. In 2016, they changed the rules to require an anesthesia end time. No one was notified, it was just changed in VSP. None of our nurses knew to fill out the Anesthesia End Time because it is hiding in VSP. PICIS was supposed to write this time but Sesh Mudumbai, the PICIS manager for VISN21, who is at Palo Alto, turned it on for Palo Alto but did not turn it on in SF, so PAVA got workload for anesthesia for 2016 and SFVAMC got zero anesthesia workload for 2016. This problem led to loss of VERA dollars. I instructed the OR nurses to fill out the Anesthesia End Time in VSP. I trained my staff to remind the nurses to fill out the Anesthesia End Time. I got the HL7 messaging from PICIS through the Databridge to VSP turned on. This link was not working properly and we put in a work order to PICIS to fix the Databridge. In 2017 and 2018, 10% of our OR cases were not completed correctly secondary to a bug in this HL7 messaging. I had to go into VSP and enter the times by hand.

I spent six months working, as part of my role with the National Anesthesia CIS/ARK program getting the settings on the Databridge set properly. This work required getting Bill Gunnar, the National Surgery Director to agree to having the Databridge write to the VSP. These settings are now correct. I also worked with the National Surgery Office to add a NORA field to the VSP and Dr Gunnar refused, despite there already being 1000 data fields in VSP.

1. **Anesthesia workload for NORA cases** is more complex. Because the VA has five different CIS/ARK vendors, and not every VA had a CIS/ARK system, John Sum-Ping, the National Anesthesia Director decided to count workload credit for NORA cases not by using VSP, and not by looking at times in the CIS/ARK system (PICIS) but by requiring us to place NORA patients in a Anesthesia NON OR Clinic and then write an Anesthesia Non OR note, and then fill out an Anesthesia Non OR Note encounter form. If any of those features are missing (note, note location, encounter form, correct CPT codes) no credit is given. If any special procedures are done like an arterial line, or a regional anesthetic, we then place the patient in the Anesthesia Special Procedures Clinic, write an Anesthesia Special Procedures Note, fill out an Anesthesia Special Procedures Encounter Form, and Enter the correct CPT codes. If any of those features are wrong, no credit is given. For many years we would fill out 1000 of these notes and get credit for 50 to 60 cases. Recently through extensive training, and effort, and retraining, we are getting credit for 80% or more of NORA cases. Each NORA case requires six notes (Anesthesia Preop Clinic (APO) note, Anesthesia Day of Surgery Note, Anesthesia Non OR Note, Anesthesia Special Procedures Note, Anesthesia PACU Discharge Note, and PICIS Note) and five encounter forms to get credit. The time assigned to a case is calculated not by how long the case took, but by an average calculated on how long it took at an average VA. If our NORA cases take longer, there is no additional credit.

Nurses do not document cases in VSP for NORA cases. Since nurses do not document NORA cases in VSP, no times are entered into the VSP for a NORA case. The NORA cases appear to not have been done. Since they appear to VSP as if they are not done, there is no requirement for the operator (surgeon, internist, cardiologist, and psychiatrist) to write an Operative Note.

1. **DataBridge:** Software that provides the interfacing between PICIS (CIS/ARK) and VISTA. It handles labs, timing, allergies, planned operation, staff assigned to case, etc. It can read and write to VISTA and VSP.

**The problem:**

In July the operating system for VISTA was upgraded. With this upgrade, the HL7 messaging from PICIS to the Databridge to VSP started working. Times were suddenly being entered into VSP by PICIS HL7 messaging. This led to cases looking like they were done in VSP and that caused VSP to send a message expecting an Operative report.

**Solutions:**

1. The easiest solution would be for the operator (surgeon, internist, cardiologist, and psychiatrist) to write a brief OP note to fulfill the VSP requirement. Anesthesia already is required to write six notes just to get workload credit, the burden of writing one note for the operator is small. This note could be templated and say this is a NORA case, there is no requirement for a dictated OP Note. It might take 60 seconds to “write” and sign such a templated note.
2. Another solution would be to have the VSP recognize that the CPT code for the procedures is a NORA case and not expect an Operative Report. This would require the National Surgery office to change how it generates these alerts.
3. A third solution would be to fix the VSP so it has a field for NORA cases which are a third of all cases. This would require the National Surgery Office to put in a change request for VSP.
4. Some facilities buy or install OR management software such as LiveData, or GUI VSP (from Jordan) which allow more flexibility. LiveData is $750,000 plus $250,000 per year per facility. ProtoViewer is free because we wrote it. GUI VSP is free.

**Recommendation:**

1. Ask National Surgery office to change their reporting system.
2. Ask the operators (surgeons, internists, cardiologists, psychiatrist) to write a templated note saying that no dictated note is neede.