

After Visit Summary

Table of contents

Introduction	3
Welcome	4
Introduction	5
Purpose	7
Feature Summary	8
Getting Started	11
AVS Workflow	11
Launching the AVS	12
View of AVS at Launch	13
Visit Selection	14
Example AVS	15
AVS Sections	23
Header	23
Visit Info, Diagnoses, Vitals, Immunizations	24
New Orders	25
Appointments	26
Instructions	27
Primary Care Team	28
Allergies and Local VA Meds	29
Non-VA Medications	30
Remote VA Medications	31
Lab Results	32
Clinical Charts	34
Footer	35
Toggling Sections	36
AVS Functionality	38
Medication Reconciliation	38
Patient Instructions	39
Edit AVS	40
Font Size	42
Clinical Services Information	43
Krames On Demand	46
Printing	50
Stub Note and VistA Imaging	53
PDF	55
Admin Settings	56
Testing Checklist	60
Installation	67

Introduction

After Visit Summary (AVS) VA Loma Linda Healthcare System

The screenshot shows the VA After Visit Summary (AVS) application window. At the top, it displays the title 'After Visit Summary' and the subtitle 'Cpres Physician (LOMA LINDA HCS)'. Below this, it shows the patient information: TEST,PATIENT | 000-00-1234 | Jan 1, 1970 (43). The status bar indicates 'Last Refreshed Sep 22, 13@13:17:00'. The main content area is titled 'After Visit Summary' and includes sections for 'Today's Visit', 'Providers', 'You Were Diagnosed With', 'Vitals as of This Visit', 'Immunizations', 'New Orders From This Visit', and 'Other Orders'. The 'Important Notes' section at the bottom contains the names of the healthcare providers: John M. Byrne, DO; Rob Durkin, MD MS; Richard Cho, RN BSN; Deanna Callahan, MPA; and Shane Elliott, MBA.

**John M. Byrne, DO
Rob Durkin, MD MS
Richard Cho, RN BSN
Deanna Callahan, MPA
Shane Elliott, MBA**

Welcome

AVS Online User Guide

Welcome to the After Visit Summary (AVS) online user guide.

This documentation is designed to help familiarize you with the features and usage of the After Visit Summary (AVS) software. Use the menu to the left to browse the help topics.

This documentation is also available as a [PDF download](#).

Additional user and technical support may be obtained by contacting Rob Durkin:

Email: robert.durkin@va.gov

Phone: 909-801-5611

Introduction

As many patients and clinicians have experienced, patients tend to forget most of what they are told during outpatient visits. In fact, patients forget 40% to 80% of the information from healthcare providers. Of what patients do remember, they remember about half incorrectly¹ and the more information they are given, the less they remember². Moreover, patients desire more information than they typically receive about their illnesses and treatment plan³. Poor retention of the treatment plan leads to non-adherence, medication errors, missed appointments and perceptions of miscommunication with the provider.

Clinical summaries of outpatient visits are a means to provide patients with the information they need after a visit with their healthcare provider⁴. The federal government recognizes the importance of this form of communication since the clinical summary, known as the After Visit Summary (AVS), is part of the meaningful use criteria that determines reimbursements for electronic health record implementation to physicians and hospitals.^{5,6} The Veterans Administration (VA) has committed to seeking meaningful use certification of the Veterans Health Information Systems and Technology Architecture (VistA) through its open source software development and an AVS would be needed to meet that certification⁷. What is currently available as an AVS through VistA and the Computerized Patient Record System (CPRS) is not adequate due terminology and formats that are neither patient-centered or patient-friendly.

In previous studies, a printed AVS has been shown to enhance patient trust and confidence in their physician⁸ and contribute to patient satisfaction.⁵ Despite the fact that combining oral and written information is more effective than using either oral or written information alone⁹, a printed AVS may be anachronous to the trend towards electronic health records. Personal Health Records (PHR's) provide patients with electronic access to their health record and may increase patients' engagement in their healthcare¹⁰. However, while the use of PHR's is increasing not all patients have access to them. In fact, most veterans have not registered for the VA's MyHealtheVet website and of those who have, only about 25% have full access to their records to include progress notes, prescriptions, secure messaging and other personal health information¹¹. Even when patients have access to a PHR, patients access the AVS more frequently than other information available to them.¹²

The AVS has been selected by the Veterans Health Administration (VHA) Innovations Selection Board and approved by the Veterans Administration (VA) Undersecretary for Health to be funded for national deployment. The VA Loma Linda Healthcare System Informatics Team is working closely with the VA's Virtual Lifetime Electronic Record (VLER) program on national deployment including uploading the AVS to MyHealtheVet (MHV) and MHV Secure Messaging. This manual provides instructions for the use of the current version of the AVS.

- 1 Kessels, RPC. Patient's memory for medical information. Journal of the Royal Society of Medicine, May 2003; 96: 219-223.
- 2 McGuire, LC. Remembering what the doctor said: organization and adults' memory for medical information. 1996;22(4): 403-428.
- 3 Tang PC, Newcomb, C. Informing patients: a guide for providing patient health information. JAMIA 1998;5(6): 563-570.

- 4 Throop C, The Ix After-Visit Summary (AVS), Center for Information Therapy. October 2009
- 5 Jha AK, et al A progress report on electronic health records in US hospitals . Health Affairs 2010: 29(10): 1951-1957
- 6 Centers for Medicare and Medicaid Services, Stage 2, Eligible Professional, Meaningful Use Table of Contents, Core and Menu Set Objectives, <https://www.cms.gov/Regulations-andGuidance/Legislation/EHRIncentivePrograms/downloads/EP-MU-TOC.pdf>
- 7 Conn J. Modern Healthcare. October 25, 2012. <http://www.modernhealthcare.com/article/20121025/NEWS/310259956>, accessed May 2013
- 8 Tang PC, Newcomb, C. Informing patients: a guide for providing patient health information. JAMIA 1998;5(6): 563-570.
- 9 Coulter A. Patient engagement – what works? J Ambulatory Care Manage.2012; 35(2): 80-89.
- 10 Archer N, Fevrier-Thomas U, Lokker C, McKibbon KA, Straus SE. Personal health records. A scoping review. JAMIA 2011; 18:515-532.
- 11 VHA Support Service Center (VSSC). https://securereports2.vssc.med.va.gov/ReportServer/Pages/ReportViewer.aspx?%2fSecureMessaging%2fSM_Penetration&rs:Command=Render , Accessed October 31, 2013
- 12 Ralston JD, Carrell, D, Reid R, Anderson M, Moran M, Hereford J. Patient web services integrated with a shared medical record: patient use and satisfaction. JAMIA 2007; 14:798-806.

Purpose

Purpose of the After Visit Summary (AVS)

- Promote patient-centered, outpatient care
- Summarize medications, appointments, tests, patient education material and other instructions
- Enhance communication
- Engage patients in their care
- Improve recall of medical instructions
- Meet electronic health record Meaningful Use criteria

Feature Summary

The AVS is automatically populated with data from CPRS and includes the following features:

- AVS is a web-based interface launched from the CPRS Tools menu
- Provides a summary of the visit, including diagnoses, vitals, new orders, upcoming appointments, provider comments/instructions, as well as information pertaining to the patient's ongoing care, including the primary care provider, allergies, and the patient's medication list.
- Encounters over last 60 days are available, with most recent encounter auto-selected.
- Integration with Clinical Context Object Workgroup (CCOW) for synchronization of patient context switching with CPRS.
- Auto-refresh every 3 minutes (a refresh button is available for when additional orders are placed in CPRS in order to update the AVS manually).
- AVS may be printed to a Windows printer as well as to a network printer.
- A stub note may be automatically created in CPRS indicating that an AVS was provided to the patient.
- AVS is automatically uploaded as a PDF document to VistA Imaging when the AVS is first printed.
- Provider may add free-text instructions for the patient.
- Provider may edit the AVS and add/modify/delete content.
- Option to include lab results and graphs of labs and vitals.
- Sections of the AVS may be toggled on or off.
- Support for multiple languages.
- Option for provider to lock the AVS to allow other users to view but not change content.
- Integration with Krames-on-Demand (automatic look up of relevant patient education handouts based on provider-entered ICD-codes, search of the Krame's library, and patient education handout printing directly from the AVS).
- Translation engine that allows for replacing orders and locations with patient-friendly text.
- Option to include clinical services information (service name, location, phone, hours of operation) in printouts.
- Customizable header and footer.
- Customizable disclaimers for facility, clinic, and provider.
- AVS patient print-out includes
 - Clinic visit information (Clinic location, provider, date, time)
 - Diagnoses (from the completed CPRS encounter form)
 - Vitals signs from the clinic visit
 - New orders from the clinic visit (consultations, lab tests, medications, including new orders, changes, and renewals, imaging, and text orders)
 - Upcoming appointments (local and remote)
 - Free text Instructions
 - Primary care provider and team
 - Allergies/adverse reactions (local and remote)
 - Updated medication list (local and remote)
 - Patient education handouts
 - Lab results
 - Selected data graphing
 - Optional patient info (demographics, smoking status, preferred language)
 - Optional clinical services information

AVS is:

- Patient-friendly
 - Enhances patient-centered, outpatient care by improving communication
- Provider -friendly
 - Automatically imports visit information, diagnoses, orders, allergies/adverse reactions, appointments and medications
 - Provides free-text entry and integration with Krames-on-Demand patient education

Getting Started

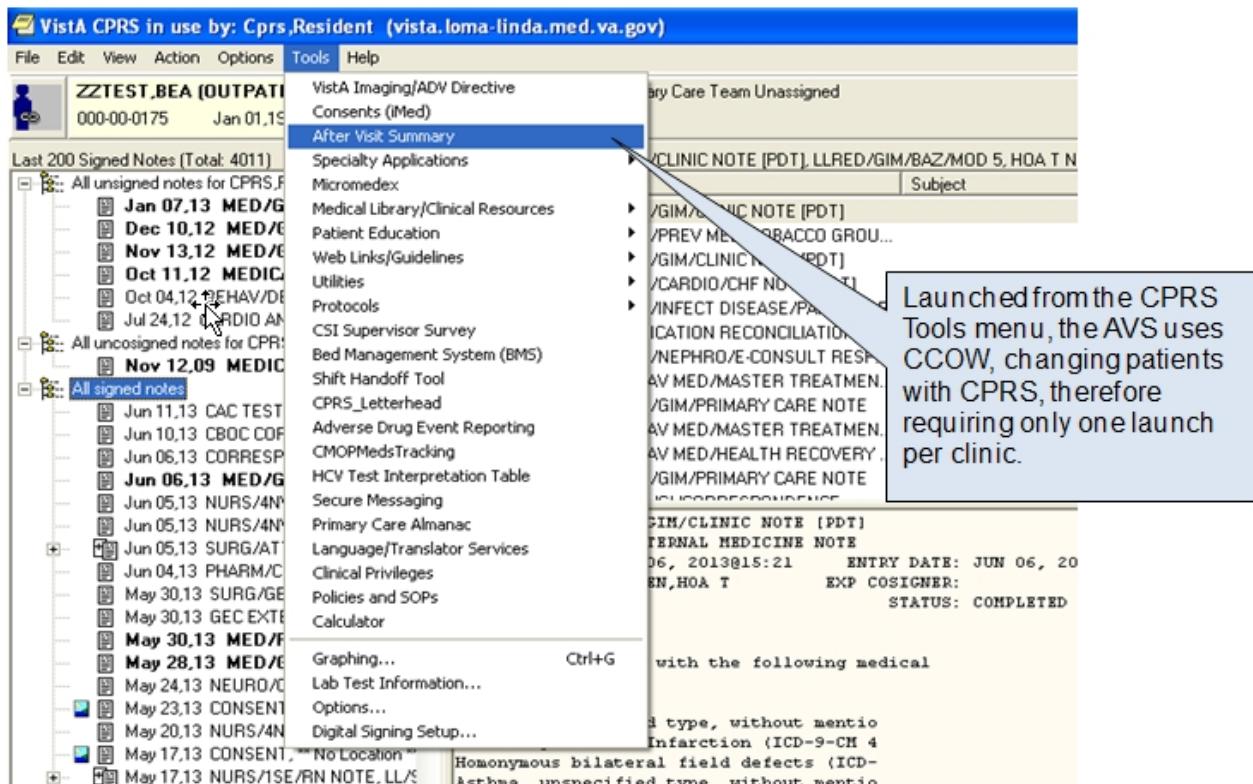
The topics in this section will familiarize you with the AVS workflow, including how to launch the AVS from the CPRS Tools menu, and what the AVS interface looks like. You'll also learn how to select a patient encounter from the drop-down list. Finally, you'll see a full example of an AVS document.

AVS Workflow

- **Provider**
 - Starts encounter note
 - Completes orders
 - Completes encounter
- **Data**
 - Automatically pulled in to AVS
 - Auto-refresh every 3 minutes, manual refresh available
- **Additional instructions**
 - Free-text instructions
 - Krames-on-Demand Education Sheets
- **Completed AVS**
 - Printed to Windows printer or network printer
 - Stub note created in CPRS
 - PDF copy saved to VistA Imaging

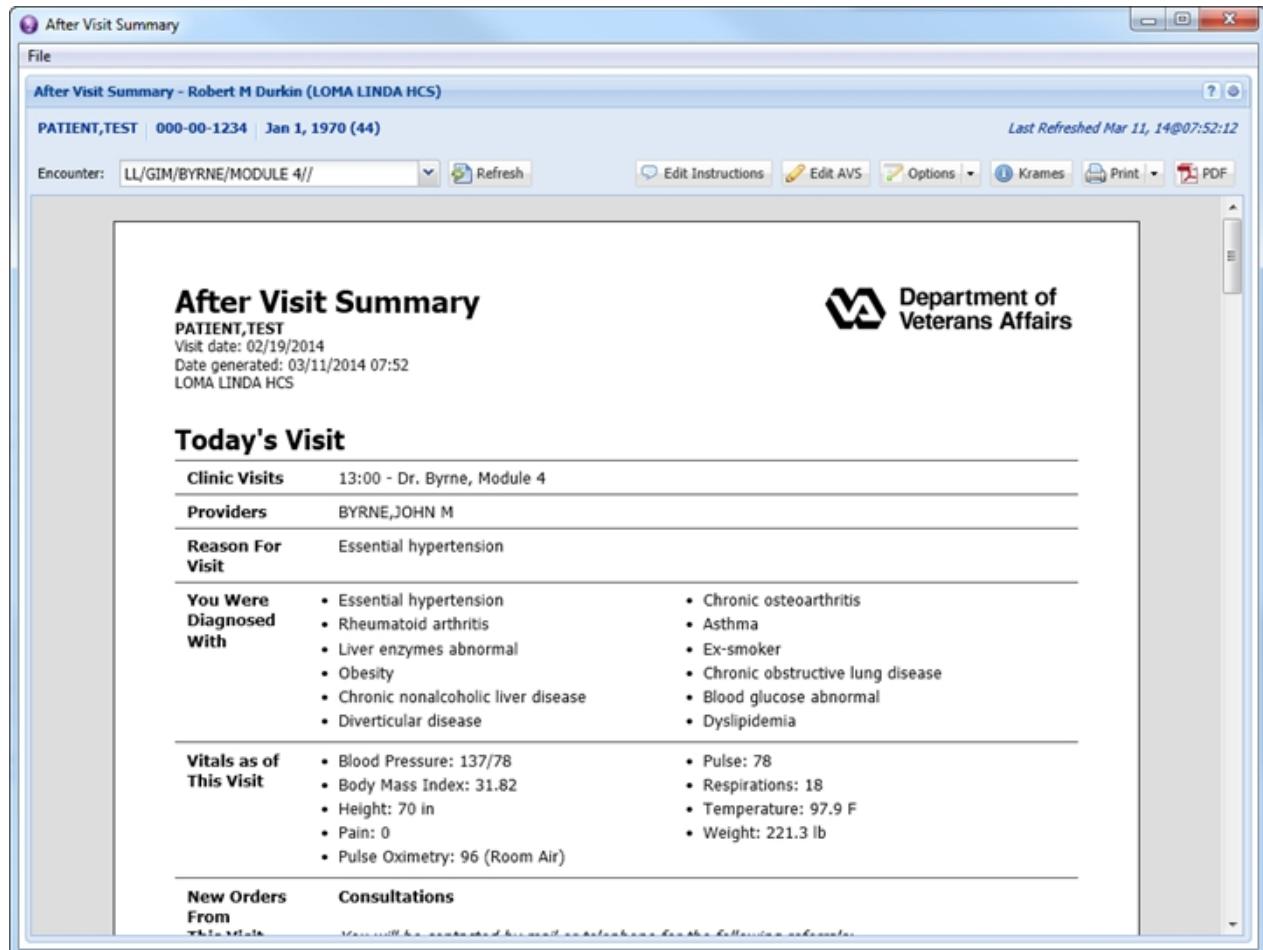
Launching the AVS

AVS is launched from the CPRS Tools menu. AVS will automatically change patients in sync with CPRS.



View of AVS at Launch

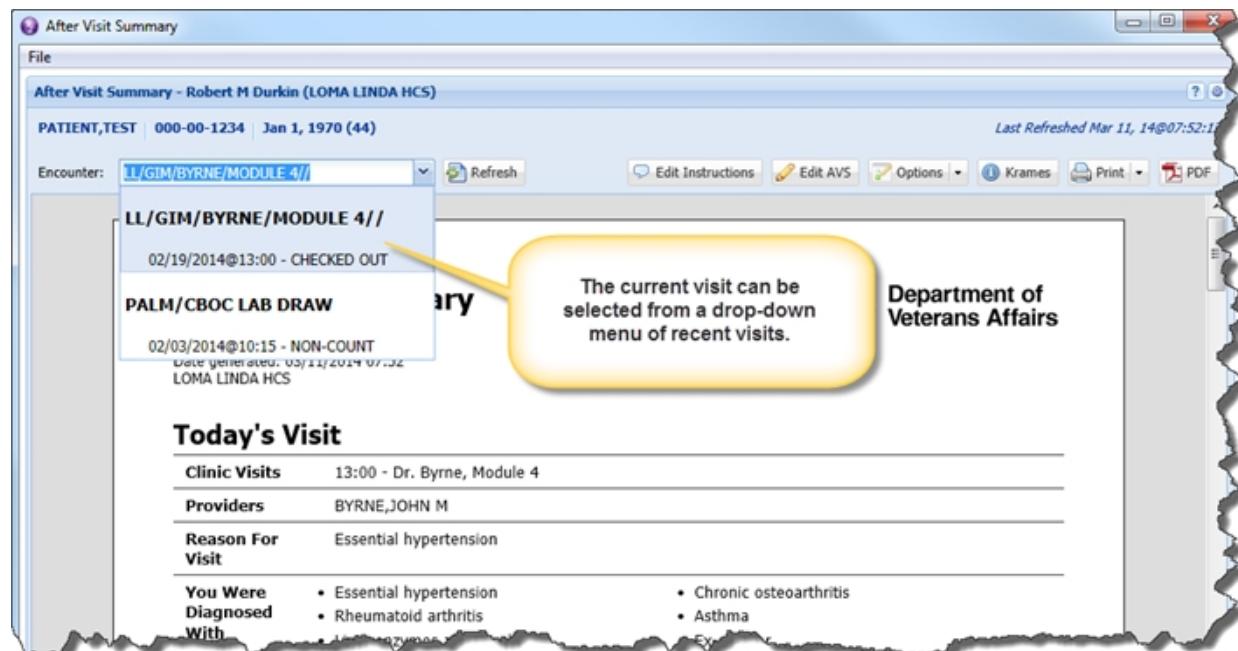
The following screen capture shows the AVS interface. The AVS is a standalone interface that is launched from but separate from CPRS.



Visit Selection

AVS loads the patient's encounters for the past 60 days and automatically displays the encounter that most closely matches the current date and time.

A different encounter can be selected from the combo box. Click the Refresh button after selecting another visit.



Example AVS

The following is an example AVS document complete with lab results and charts.

After Visit Summary		 Department of Veterans Affairs
TEST,PATIENT Visit date: 09/18/2013 Date generated: 09/23/2013 06:48 LOMA LINDA HCS		
Today's Visit		
Clinics Visited • 13:30 - Dr. Byrne, Module 4 / PROVIDER,JANE • 15:00 - Li/Surg/Pod/Wound Limb/Wed / PROVIDER,JANE		
Providers GOMEZ,LAUREN M BYRNE,JOHN M		
You Were Diagnosed With <ul style="list-style-type: none">• Essential hypertension• Obesity• Dyslipidemia• Cholelithiasis without obstruction• Smoker• Coronary arteriosclerosis• Ankylosing spondylitis• Hypersomnia with sleep apnea• Dyspnea• Chronic obstructive lung disease• Diabetes mellitus type 2• Gastroesophageal Reflux Disease		
Vitals as of This Visit <ul style="list-style-type: none">• Blood Pressure: 128/54• Body Mass Index: 34.58• Pain: 7• Pulse Oximetry: 96 (Room Air)• Pulse: 66• Respirations: 18• Temperature: 98.1 F• Weight: 233.7 lb		
Immunizations • FLU,3 YRS		
New Orders From This Visit Lab Tests <p><i>Please report to the lab for the following blood tests on the date listed for each test:</i></p> <p><u>01/16/2014</u></p> <ul style="list-style-type: none">• Basic Metabolic Panel (Chem 7) Blood Serum• Hemoglobin A1c (Lab) Blood• Lipid Profile Blood Serum• Hepatic Function Panel Blood Serum		
Other Orders <ul style="list-style-type: none">• Return To Clinic In 4 Months		

Important Notes

Upcoming Appointments	Appointments in the next 3 months:
	10/02/2013 14:00 - Li/Surg/Pod/Wound Limb/Wed

Instructions	Monitor your BP daily and keep a log.
---------------------	---------------------------------------

My Ongoing Care

Primary Care Provider	BYRNE,JOHN M MOD 4 - PACT TEAM A
------------------------------	-------------------------------------

Allergies (Reactions)	• Lisinopril (Hyperkalemia)
------------------------------	-----------------------------

My Current Medications The medications listed below were reviewed with you by your provider and is provided to you as an updated list of medications. Please remember to inform your provider of any medication changes or discrepancies that you note. Otherwise, please continue these medications as prescribed.

Accu-Chek Aviva 1-2 Control Soln

USE 1 DROP AS DIRECTED TO CALIBRATE NEW TEST STRIPS
Refills: 3 Last Filled: February 05, 13 Expires: February 06, 14

Accu-Chek Aviva Plus(Glucose) Test Strip

USE 1 STRIP FOR TESTING EVERY OTHER DAY TO CHECK BLOOD SUGARS
Refills: 3 Last Filled: February 05, 13 Expires: February 06, 14

Adalimumab 40mg/0.8ml Inj Pen Kit

INJECT 40MG (0.8ML) UNDER THE SKIN EVERY 2 WEEKS FOR ANKYLOSING SPONDYLITIS
Refills: 3 Last Filled: September 06, 13 Expires: August 30, 14

Albuterol 100/Ipratro 20mcg 120d Po Inhl

INHALE 1 PUFF BY MOUTH FOUR TIMES A DAY
Refills: 1 Last Filled: June 28, 13 Expires: June 29, 14

Amoxicillin 875/Clav K 125mg Tab

TAKE 1 TABLET BY MOUTH TWICE A DAY WITH MEALS FOR 14 DAYS FOR INFECTION
Refills: 0 Last Filled: September 04, 13 Expires: October 04, 13

Aspirin 81mg Ec Tab

81MG MOUTH Recommended by VA provider, but purchased at non VA location
Refills: 0

Bupropion Hcl 300mg 24hr Sa Tab

TAKE ONE TABLET BY MOUTH DAILY FOR DEPRESSION
Refills: 3 Last Filled: June 28, 13 Expires: June 28, 14

Clotrimazole 1% Top Cream

APPLY SMALL AMOUNT TOPICALLY DAILY APPLY TO BOTH FEET FOR FUNGUS DAILY
Refills: 2 Last Filled: March 18, 13 Expires: February 12, 14

Docusate Na 250mg Cap

TAKE ONE CAPSULE BY MOUTH DAILY AS STOOL SOFTENER
Refills: 3 Last Filled: July 19, 13 Expires: June 29, 14

Dressing,Duoderm 4in X 4in C#1879-55

APPLY DRESSING(S) TOPICALLY EVERY OTHER DAY
Refills: 0 Last Filled: February 04, 13 Expires: December 13, 13

Gauze Pad 2in X 2in 12-Ply Nonsterile

USE GAUZE TOPICALLY AS DIRECTED
Refills: 3 Last Filled: June 10, 13 Expires: June 11, 14

Hydrochlorothiazide 25mg Tab

TAKE ONE-HALF TABLET BY MOUTH DAILY
Refills: 3 Last Filled: April 05, 13 Expires: January 03, 14

Hydrocortisone 1% Cream

APPLY SMALL AMOUNT TOPICALLY DAILY APPLY TO FEET
Refills: 0 Last Filled: June 27, 13 Expires: June 11, 14

Kling 4in Sterile

USE BANDAGE TOPICALLY AS DIRECTED - 1 PER DAY
Refills: 3 Last Filled: September 04, 13 Expires: September 05, 14

Lancet

USE LANCET AS DIRECTED
Refills: 3 Last Filled: February 05, 13 Expires: February 06, 14

Metformin Hcl 1000mg Tab

TAKE ONE-HALF TABLET BY MOUTH TWICE A DAY WITH MEALS
Refills: 3 Last Filled: July 31, 13 Expires: August 01, 14

Metoprolol Tartrate 25mg Tab

TAKE THREE TABLETS BY MOUTH TWICE A DAY FOR BLOOD PRESSURE AND HEART
Refills: 3 Last Filled: October 13, 13 Expires: September 19, 14

Morphine Sulf 30mg Cr Tab

TAKE ONE TABLET BY MOUTH TWICE A DAY FOR PAIN (TO LAST UNTIL 10/25/13)
Refills: 0 Last Filled: September 20, 13 Expires: October 09, 13

Multivitamin/Minerals Therapeut Cap/Tab

1 CAPSULE MOUTH DAILY OTC product Herbal/Nutritional supplement
Refills: 0 Expires: May 24, 11

Nicotine 21mg/24hr Patch

APPLY 21MG/24HRS PATCH TOPICALLY EVERY OTHER 12HRS FOR SMOKING CESSATION
Refills: 1 Last Filled: October 05, 13 Expires: September 19, 14

Nicotine Polacrilex 4mg Lozenge

TAKE 1 LOZENGE BY MOUTH EVERY 1 HOUR AS NEEDED FOR SMOKING CESSATION (NFDA)
Refills: 0 Last Filled: May 28, 13 Expires: March 19, 14

Omeprazole 20mg Ec Cap

TAKE ONE CAPSULE BY MOUTH TWICE A DAY 30 MINUTES BEFORE MEALS FOR STOMACH
ACID
Refills: 2 Last Filled: July 30, 13 Expires: January 03, 14

Oxycodone 5mg Tab

TAKE 1 TO 2 TABLET(S) BY MOUTH EVERY 4 HOURS FOR PAIN. TO LAST UNTIL 10/25/13
Refills: 0 Last Filled: September 20, 13 Expires: October 09, 13

Pyridoxine Hcl 50mg Tab

TAKE TWO TABLETS BY MOUTH DAILY
Refills: 0 Last Filled: July 12, 13 Expires: December 15, 13

Sennosides 8.6mg Tab

TAKE TWO TABLETS BY MOUTH AT BEDTIME FOR CONSTIPATION

Refills: 1 Last Filled: June 12, 13 Expires: January 30, 14

Simvastatin 80mg TabTAKE ONE-HALF TABLET (=40MG) BY MOUTH AT BEDTIME FOR CHOLESTEROL **NOTE THE
STRENGTH CHANGED

Refills: 2 Last Filled: October 13, 13 Expires: September 19, 14

Sulindac 200mg Tab

TAKE ONE TABLET BY MOUTH TWICE A DAY WITH FOOD

Refills: 1 Last Filled: August 29, 13 Expires: March 01, 14

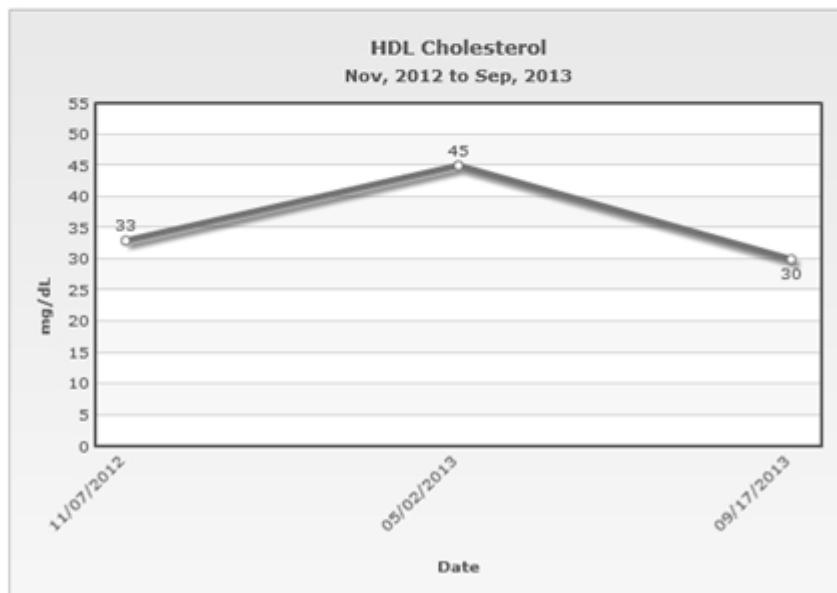
Tape,Micropore 1in 3m #1530-1

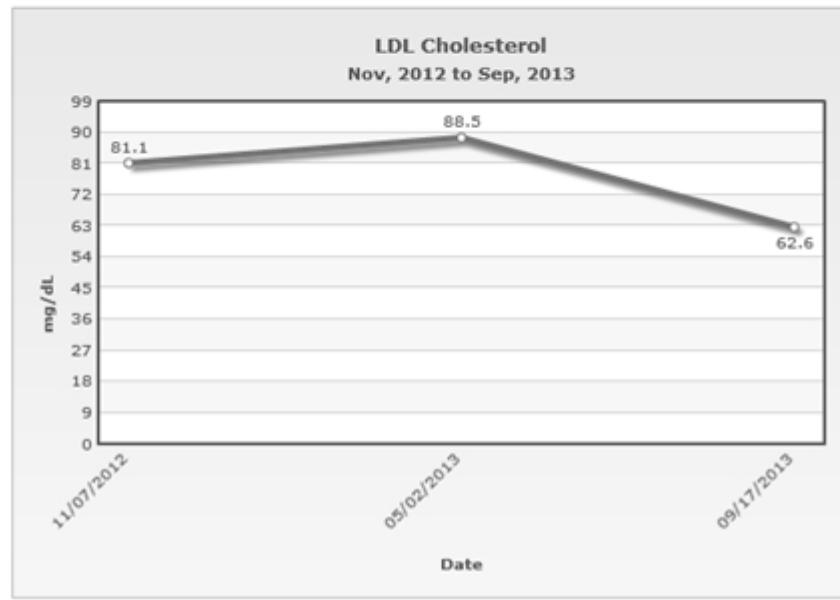
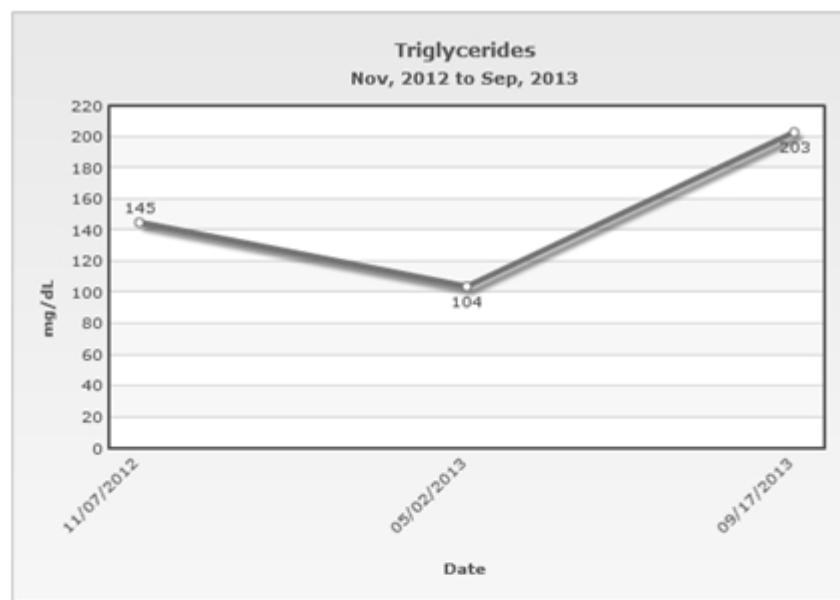
USE TAPE AS DIRECTED

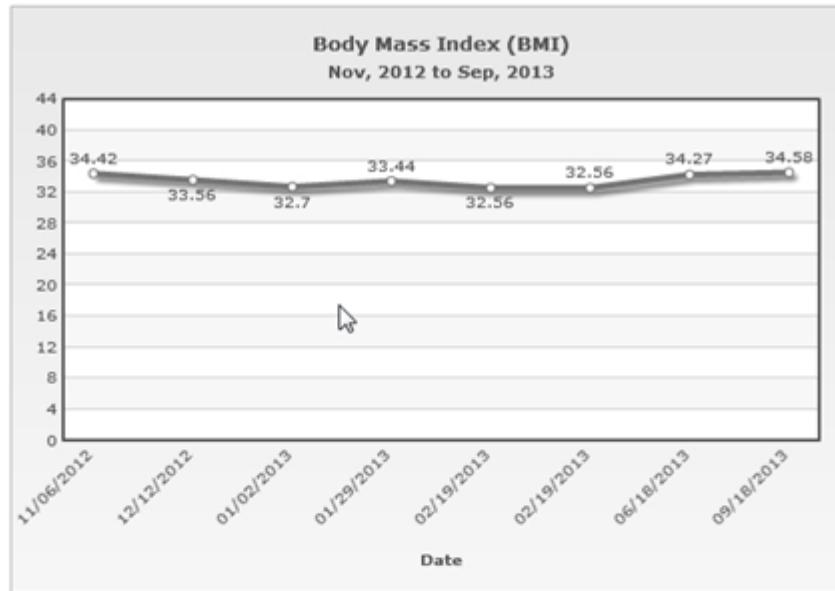
Refills: 3 Last Filled: September 04, 13 Expires: September 05, 14

Urea 20% Crm 90gmAPPLY SMALL AMOUNT TOPICALLY AS DIRECTED -- APPLY TO CALLUS ON RIGHT FOOT
TWICE A DAY

Refills: 1 Last Filled: April 27, 13 Expires: January 08, 14

**Clinical
Graphs**





Recent Lab Results

Report Released Date/Time: Sep 18, 2013@04:36

Provider: BYRNE, JOHN M

Specimen: BLOOD. MAN 0917 223

Specimen Collection Date: Sep 17, 2013@10:00

Test name	Result	units	Ref.	range	Site Code
HEMOGLOBIN A1C (LAB)	5.9	%	4.2 - 5.9	[605]	
Eval: SUGGESTED INTERPRETATION GLYCOSYLATED HEMOGLOBIN RESULTS:					
Eval: HGB A1C OF <6% CONSISTENT WITH NORMAL GLYCEMIA					
Eval: HGB A1C OF 6-6% SUGGESTS ACCEPTABLE GLUCOSE CONTROL					
Eval: HGB A1C OF 8-10% SUGGESTS FAIR GLUCOSE CONTROL					
Eval: HGB A1C OF OVER 10% SUGGESTS POOR GLUCOSE CONTROL					
Eval: RESULTS ADVERSELY AFFECTED BY HGB F >16%, HGB'S D AND E,					
Eval: AND HOMOZYGOUS HGB'S S AND C.					

Report Released Date/Time: Sep 17, 2013@16:58

Provider: BYRNE, JOHN M

Specimen: SERUM. DK 0917 612

Specimen Collection Date: Sep 17, 2013@10:00

Test name	Result	units	Ref.	range	Site Code
SODIUM	137	mMol/L	136	- 144	[605]
POTASSIUM	4.1	mMol/L	3.6	- 5.1	[605]
CHLORIDE	99	L	101	- 111	[605]
CO2	30.0	mMol/L	22	- 32	[605]
UREA NITROGEN	20	mg/dL	8	- 20	[605]
CREATININE	1.08	mg/dL	.64	- 1.27	[605]
eGFR	>60	mL/min	Ref:	>=60	[605]
Eval: eGFR is calculated by 4-variable MDRD equation of Levey modified for					
Eval: standardized creatinine. Stable creatinine presumed - ignore eGFR in					
Eval: dialysis patients. Interpret with caution in patients with acute renal					
Eval: failure. Units for eGFR are in mL/min/1.73 square meters.					
GLUCOSE	80	mg/dL	74	- 118	[605]
CALCIUM	9.4	mg/dL	8.9	- 10.3	[605]
PROTEIN TOTAL	6.6	gm/dL	6.1	- 7.9	[605]

ALBUMIN	4.1	gm/dL	3.5 - 4.8	[605]
TOT. BILIRUBIN	0.8	mg/dL	0.2 - 1.2	[605]
DIR. BILIRUBIN	0.10	mg/dL	0.1 - 0.5	[605]
ALKALINE PHOSPHATASE	69	IU/L	32 - 91	[605]
ALT	19	IU/L	17 - 63	[605]
	Eval: New sexed reference ranges in effect as of 6/7/13.			
AST	24	IU/L	15 - 41	[605]
CHOLESTEROL	133	mg/dL	0 - 200	[605]
	Eval: BORDERLINE ELEVATED: 201-239 mg/dL			
	Eval: ELEVATED: OVER 240 mg/dL			
TRIGLYCERIDES	203	H mg/dL	0 - 150	[605]
	Eval:			
	Eval: BORDERLINE: 150-199 mg/dL			
	Eval: HIGH: 200-499 mg/dL			
	Eval: VERY HIGH: >500 mg/dL			
HDL CHOLESTEROL	30	L mg/dL	40 - 60	[605]
	Eval: High Risk = <40 mg/dL			
	Eval: Low Risk = >60 mg/dL			
CALC LDL CHOL	62.6	mg/dL	0 - 100	[605]
HDL RISK FACTOR	4.4		4.0 - 6.7	[605]
	Eval: RISK = CHOLESTEROL/HDL CHOLESTEROL			

Report Released Date/Time: Sep 17, 2013@10:33

Provider: BYRNE, JOHN M

Specimen: URINE RANDOM DX 0917 611

Specimen Collection Date: Sep 17, 2013@10:00

Test name	Result	units	Ref. range	Site Code
URINE ALBUMIN	1.7	mg/dL	0 - 1.9	[605]
CREATININE, URINE	170.0	mg/dL		[605]
MICROALB/CREAT RATIO	10.0			
	Eval: Reference ranges for Albumin / creatinine ratio:			
	Eval: <30 mg Albumin / gram Creatinine = Normal range			
	Eval: 30 - 300 mg Albumin / gram Creatinine = Micro-albuminuria range			
	Eval: >300 mg Albumin / gram Creatinine = Macro-albuminuria range			
	Eval: To establish a clinical diagnosis of microalbuminuria using these			
	Eval: ranges, see algorithm in Am J Kidney Disease (1995)25:107-112.			
	Eval: Ratio not calculated if urine albumin is <0.2 mg/dL.			

Performing Lab Sites
[605] LOMA LINDA HCS [CLIA# 05D0988208]
11201 BENTON ST LOMA LINDA, CA 92357-1000

This information is meant to provide a summary of your appointment with your health care provider. If you have any questions about your care including test results, medications, diagnoses or other concerns, please contact your health care provider. Please bring this form to your next visit as a record of your medications and alert your provider to any changes in your medications.

To contact your primary care provider, please call 909-825-8084 or 1-800-741-8387 and follow the prompts to the Module where your primary care provider is located. To refill a prescription, please call 909-777-3259 or visit www.myhealth.va.gov. For care on evenings and weekends, please call 24 hour Telephone Care at 1-877-252-4866.

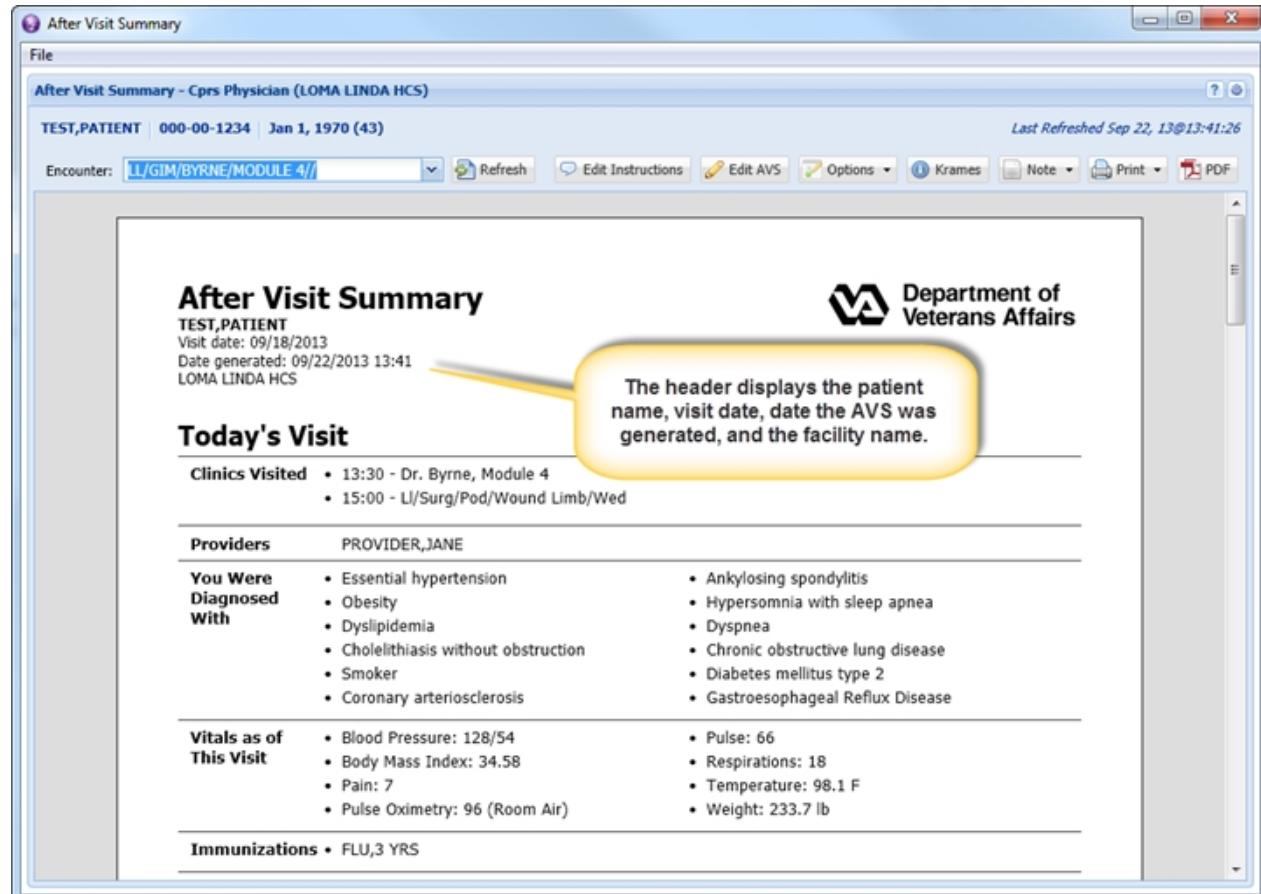
Access health resources. Track your health. Refill VA prescriptions. Visit www.myhealth.va.gov! Ask your health care team about in-person authentication and begin ordering medications and viewing appointments through MyHealtheVet. After completing in-person authentication, click on "Secure Messaging" in MyHealtheVet and select "I would like to opt in to secure messaging" in order to send email messages to your providers.

AVS Sections

This section of the user guide will introduce you to each of the section of the AVS document.

Header

The header, displayed at the top of the AVS document, displays the patient name, visit date, date the AVS was generated, and the facility name. The format and content of the header may be customized for a facility in the administration interface.



Visit Info, Diagnoses, Vitals, Immunizations

The following screen capture points out the sections that contain the visit and provider information, the patient's diagnoses, vital signs, and immunizations.

The screenshot shows the 'After Visit Summary' window for a patient. At the top, it displays 'TEST,PATIENT | 000-00-1234 | Jan 1, 1970 (43)' and 'Last Refreshed Sep 22, 13@12:58:27'. The main content area is titled 'After Visit Summary' and includes the following sections:

- Clinics Visited:** 13:30 - Dr. Byrne, Module 4; 15:00 - Li/Surg/Pod/Wound Limb/Wed
- Providers:** PROVIDER,JANE
- You Were Diagnosed With:**
 - Essential hypertension
 - Obesity
 - Dyslipidemia
 - Cholelithiasis without obstruction
 - Smoker
 - Coronary arteriosclerosis
 - Ankylosing spondylitis
 - Hypersomnia with sleep apnea
 - Dyspnea
 - Chronic obstructive lung disease
 - Diabetes mellitus type 2
 - Gastroesophageal Reflux Disease
- Vitals as of This Visit:**
 - Blood Pressure: 128/54
 - Body Mass Index: 34.58
 - Pain: 7
 - Pulse Oximetry: 96 (Room Air)
 - Pulse: 66
 - Respirations: 18
 - Temperature: 98.1 F
 - Weight: 233.7 lb
- Immunizations:** FLU,3 YRS
- New Orders From This Visit:** Lab Tests

Annotations with yellow callouts point to specific sections:

- A callout points to the 'Clinics Visited' section with the text 'Visit data and provider information.'
- A callout points to the 'You Were Diagnosed With' section with the text 'Diagnoses entered on the CPRS encounter form.'
- A callout points to the 'Vitals as of This Visit' section with the text 'Vital signs associated with the visit in CPRS.'
- A callout points to the 'Immunizations' section with the text 'Immunizations are displayed.'

The Department of Veterans Affairs logo is visible in the top right corner of the window.

New Orders

The following screen capture shows the New Orders section of the AVS. The orders section is categorized by type of order, including Consultations, Imaging, Lab Tests, Medications, and Text Orders.

New Orders From This Visit

Consultations
You will be contacted by mail or telephone for the following referrals:

- Rheumatology Consult

Imaging
Please report to the imaging service for the following studies on the date listed for each study:
10/01/2014

- Hand Right 2 View Axillary Bilateral Exam
- Hand Left 2 View Axillary Bilateral Exam

Lab Tests
Please report to the lab for the following blood tests on the date listed for each test:
10/01/2014

- Hemoglobin A1c (Lab) Blood
- Lipid Profile Blood Serum
- Hepatic Function Panel Blood Serum
- Basic Metabolic Panel (Chem 7) Blood Serum

Medications
Note: This section **only** lists changes to your medication regimen. Please see your complete medication list under **My Ongoing Care** below.

New Orders

- Sertraline Tab 25mg
- Loratadine Tab,Oral 10mg

Renewed

- Budesonide/Formoterol Inhl,Oral Budesonide 160/Formoter 4.5mcg 120d Inh

Other Orders

- Return To Clinic In October 2014

Orders for consultations and imaging are displayed.

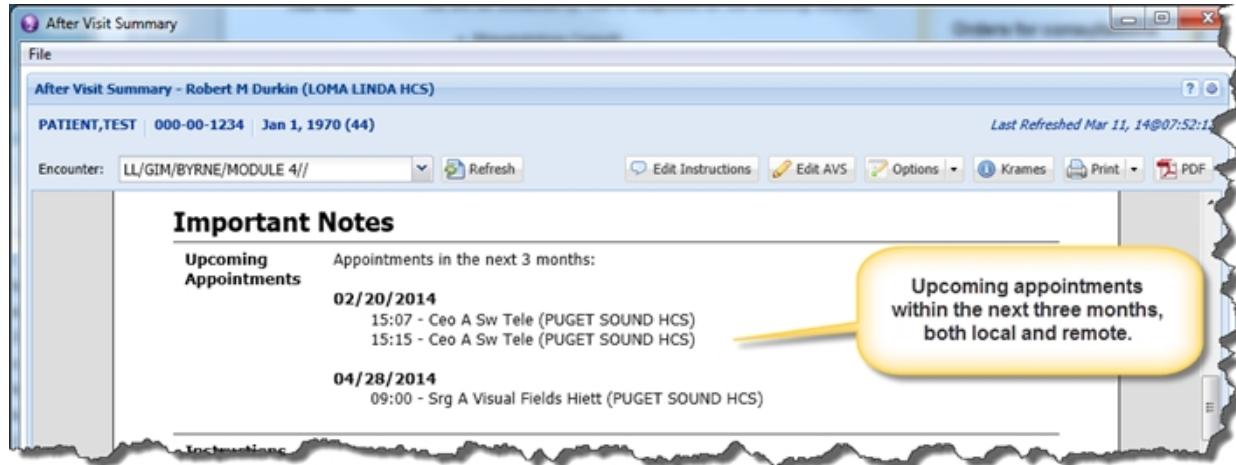
Lab orders with scheduled date.

New medication orders and changes in medications are displayed here.

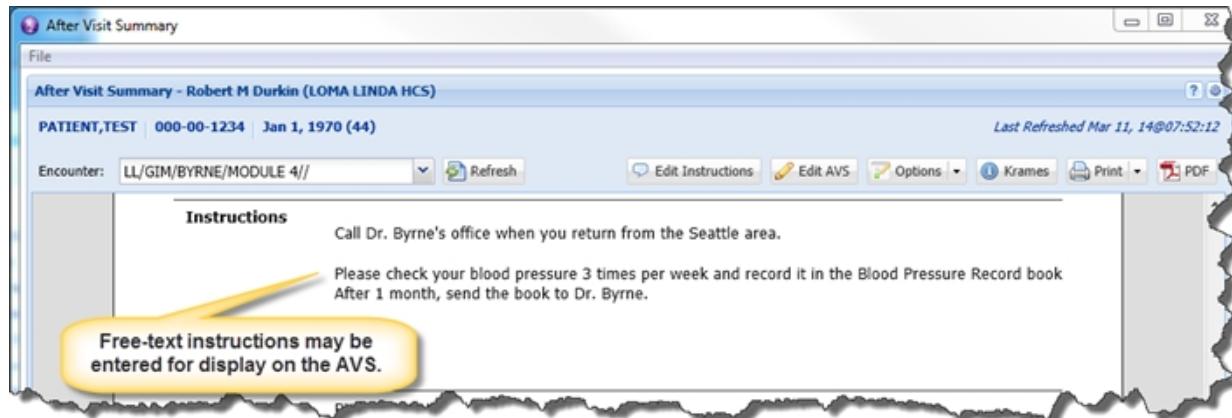
Text orders are included for such things as return visits, immunizations, etc.

Appointments

The following screen capture shows the upcoming local and remote appointments within the next three months. This time period is configurable by facility.

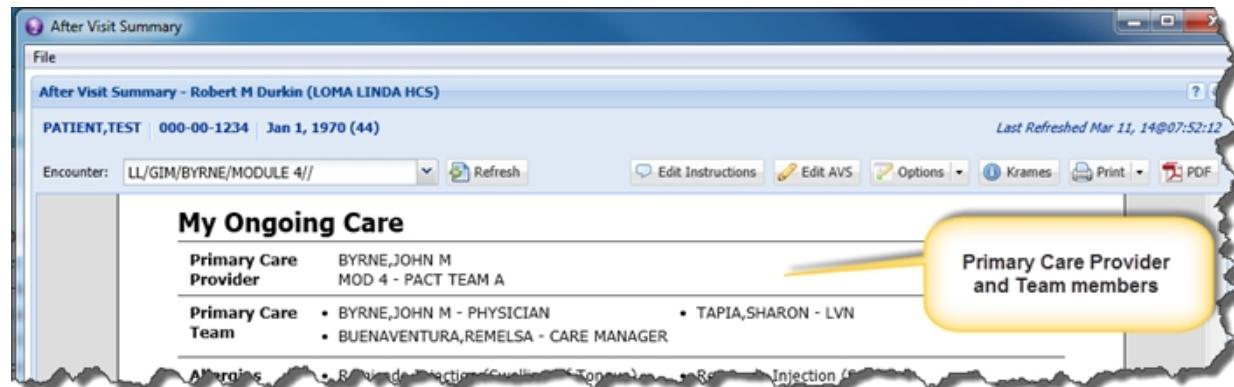


Instructions



Primary Care Team

The following screen capture shows the patient's Primary Care Provider (PCP) and the Primary Care Team members.



Allergies and Local VA Meds

The following screen capture shows the patient's allergies and adverse reactions (local and remote), and the patient's current list of local VA medications.

The screenshot displays the 'After Visit Summary' window for Robert M Durkin (LOMA LINDA HCS). The top navigation bar includes 'File', 'Edit Instructions', 'Edit AVS', 'Options', 'Krames', 'Print', and 'PDF'. The main content area shows 'Allergies (Reactions)' and 'My Current VA Medications'. A yellow callout box points to the 'Allergies (Reactions)' section, which lists 'Remicade Injection (Swelling Of Tongue)' and 'Remicade Injection (Swelling) Documenting Facility: PUGET SOUND HCS'. Another yellow callout box points to the 'My Current VA Medications' section, which contains a detailed list of medications with their descriptions, refills, last released date, and expiration date. A third yellow callout box points to the right side of the screen, stating 'Physical descriptions of the medications are obtained from the VA's Medication Image Library (MIL)'. The bottom status bar indicates the last refresh was on Mar 11, 2014, at 14:07:52:12.

PATIENT,TEST | 000-00-1234 | Jan 1, 1970 (44)

Last Refreshed Mar 11, 14@07:52:12

Encounter: LL/GIM/BYRNE/MODULE 4//

Allergies (Reactions)

- Remicade Injection (Swelling Of Tongue)
- Remicade Injection (Swelling) Documenting Facility: PUGET SOUND HCS

My Current VA Medications

The medications listed below were reviewed with you by your provider and is provided to you as an updated list of medications. Please remember to inform your provider of any medication changes or discrepancies that you note. Otherwise, please continue these medications as prescribed.

Albuterol So4 0.083% Inhal 3ml
TAKE 1 VIAL IN NEBULIZER BY INHALATION THREE TIMES A DAY
Refills: 3 Last Released: November 21, 2013 Expires: November 21, 2014

Budesonide 160/Formoterol 4.5mcg 120d Inh
INHALE 2 PUFFS BY MOUTH TWICE A DAY FOR BREATHING (RINSE YOUR MOUTH AFTER USE)
Refills: 5 Last Released: February 20, 2014 Expires: February 20, 2015

Fluticasone Prop 50mcg 120d Nasal Inhl
INSTILL 1 SPRAY IN BOTH NOSTRILS DAILY FOR RHINITIS/ALLERGIES
Refills: 3 Last Released: November 22, 2013 Expires: November 21, 2014

Hydrocodone 5mg/Acetaminophen 325mg Tab
TAKE 1-2 TABLETS BY MOUTH THREE TIMES A DAY **DO NOT TAKE MORE THAN 3000MG OF ACETAMINOPHEN PER DAY**
Refills: 1 Last Released: November 29, 2013 Expires: May 23, 2014
Description: oval, white, imprinted with: M365

Hydroxychloroquine Sulfate 200mg Tab
TAKE TWO TABLETS BY MOUTH DAILY FOR RHEUMATOID ARTHRITIS
Refills: 3 Last Released: January 03, 2014 Expires: November 14, 2014
Description: oval, white, imprinted with: WATSON, 698,200

Loratadine 10mg Tab
TAKE ONE TABLET BY MOUTH DAILY FOR ALLERGIES
Refills: 3 Last Released: February 20, 2014 Expires: February 20, 2015
Description: oval, white, imprinted with: L612

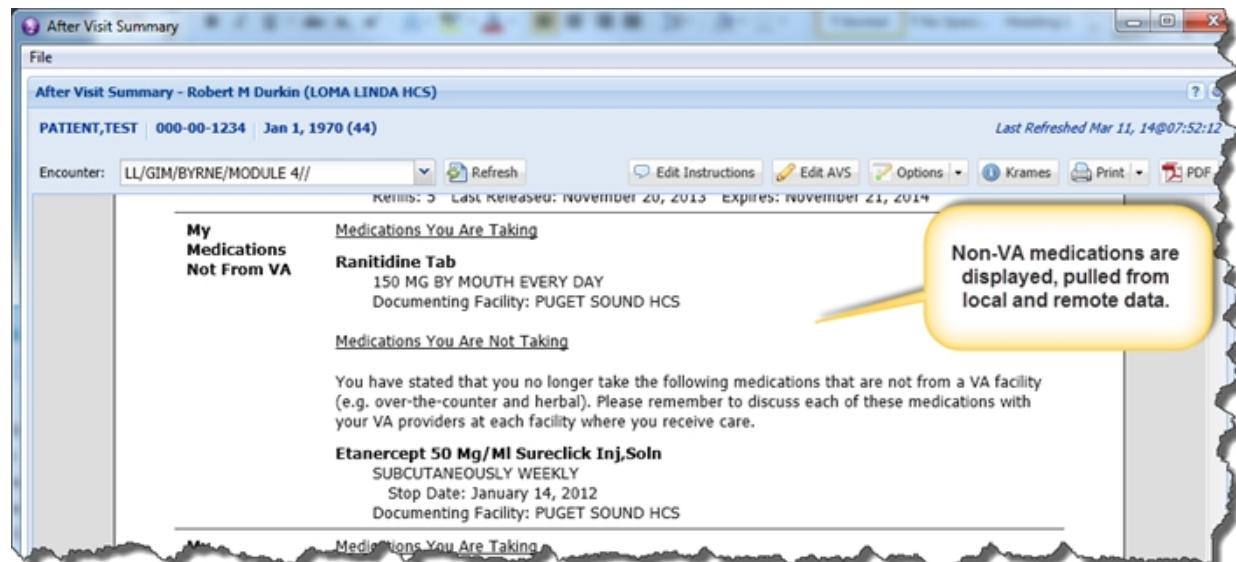
Pravastatin Na 20mg Tab
TAKE ONE TABLET BY MOUTH AT BEDTIME FOR HIGH CHOLESTEROL
Refills: 2 Last Released: November 21, 2012 Expires: November 21, 2014

Patient's allergies and adverse reactions, both local and remote.

Physical descriptions of the medications are obtained from the VA's Medication Image Library (MIL).

Non-VA Medications

Non-VA medications are pulled from the local as well as remote VistA databases for display. These meds are categorized according to how they were reconciled by the provider (see [Medication Reconciliation](#) in the AVS Functionality section).



Remote VA Medications

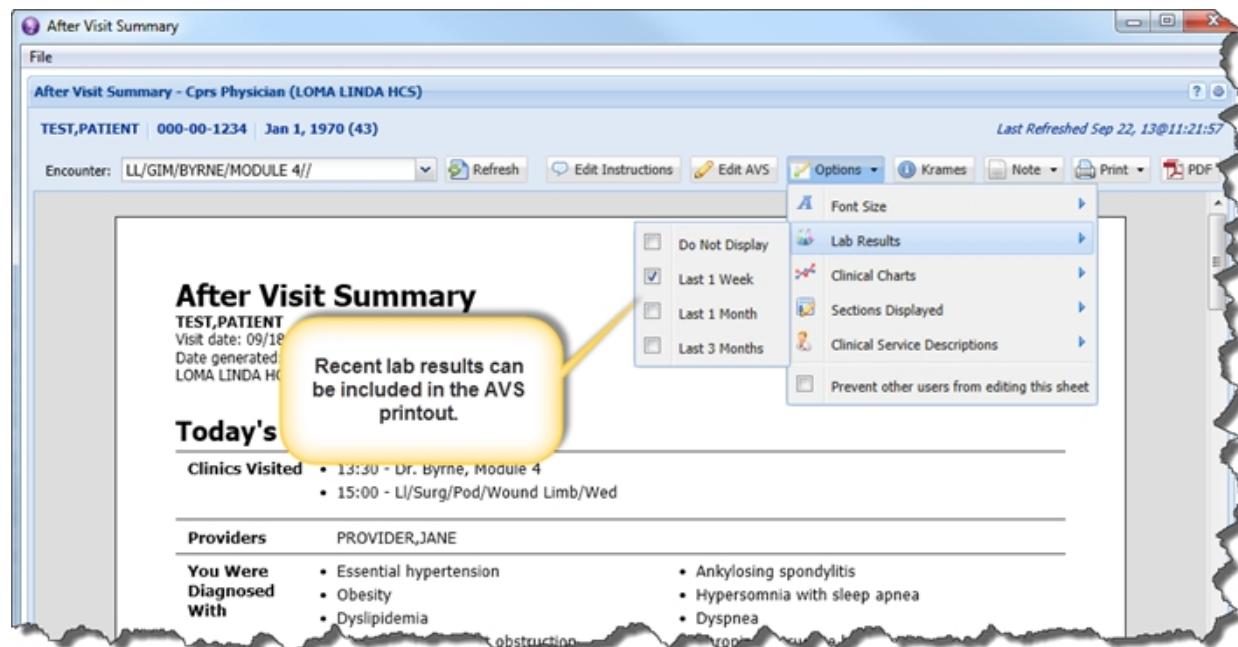
Remote VA medications are displayed and categorized according to how they were reconciled by the provider (see [Medication Reconciliation](#) in the AVS Functionality section).

The screenshot shows the 'After Visit Summary' window for patient Robert M Durkin (LOMA LINDA HCS). The encounter is listed as LL/GIM/BYRNE/MODULE 4//. The window displays a list of medications under the heading 'My Medications From Other VAs'. A yellow callout bubble on the left side of the screen contains the text: 'Remote medications are imported from other VAs and are categorized according to the medication reconciliation performed by the provider.' The list includes:

- Tiotropium 18 Mcg Inhal Cap 30**
INHALE CONTENTS OF ONE CAPSULE IN INHALER AS DIRECTED EVERY DAY---REPLACES IPATROPIUM
Refills: 0 Last Released: December 19, 2013 Expires: January 17, 2014 Facility: PUGET SOUND HCS Provider: ERSKINE,MICHAEL S
- Albuterol 90mcg (Cfc-F) 200d Oral Inhaler**
INHALE 2 PUFFS 90MCG/INHL BY MOUTH FOUR TIMES A DAY FOR SHORTNESS OF BREATH (WAIT ONE MINUTE BETWEEN PUFFS)
Refills: 0 Last Released: December 19, 2013 Expires: January 14, 2014 Facility: PUGET SOUND HCS Provider: ERSKINE,MICHAEL S
- Budesonide 160/Formoterol 4.5mcg 120d Inh**
INHALE TWO PUFFS BY MOUTH TWICE A DAY * RINSE MOUTH AFTER USING *
Refills: 0 Last Released: February 03, 2014 Expires: January 17, 2014 Facility: PUGET SOUND HCS Provider: ERSKINE,MICHAEL S
- Adalimumab 40mg/0.8ml Inj Pen Kit**
INJECT 40 MG (0.8 ML) OF 40MG/0.8ML SUBCUTANEOUSLY EVERY OTHER WEEK FOR RHEUMATOID ARTHRITIS
Refills: 0 Last Released: December 18, 2013 Expires: January 17, 2014 Facility: PUGET SOUND HCS Provider: ERSKINE,MICHAEL S
- Hydrochlorothiazide 25 Mg Tab**
TAKE ONE TABLET BY MOUTH EVERY MORNING TO LOWER BLOOD PRESSURE (WATERPILL)
Refills: 0 Last Released: December 19, 2013 Expires: January 17, 2014 Facility: PUGET SOUND HCS Provider: ERSKINE,MICHAEL S Description: round, orange, imprinted with EP,131
- Cetirizine 10 Mg Tab**
TAKE ONE-HALF TABLET BY MOUTH EVERY DAY TO RELIEVE ALLERGY SYMPTOMS
Refills: 0 Last Released: December 19, 2013 Expires: January 14, 2014 Facility: PUGET SOUND HCS Provider: ERSKINE,MICHAEL S Description: oval, white, imprinted with 4H2
- Flunisolide 0.025% 200d Nasal Inh Spray**
INHALE 2 SPRAYS IN EACH NOSTRIL TWICE A DAY TO REDUCE NASAL CONGESTION
Refills: 0 Last Released: December 19, 2013 Expires: January 14, 2014 Facility: PUGET SOUND HCS Provider: ERSKINE,MICHAEL S
- Leflunomide 20 Mg Tab**
TAKE ONE TABLET BY MOUTH EVERY DAY WITH A MEAL FOR RHEUMATOID ARTHRITIS
Refills: 0 Last Released: December 18, 2013 Expires: January 14, 2014 Facility: PUGET SOUND HCS Provider: ERSKINE,MICHAEL S

Lab Results

Lab results may optionally be included in the AVS. By default, lab results are not included and must be selected from the Options menu. The user may choose to import lab results from the previous week, month, or from the last three months.



After Visit Summary

File

After Visit Summary - Cprs Physician (LOMA LINDA HCS)

TEST,PATIENT | 000-00-1234 | Jan 1, 1970 (43)

Last Refreshed Sep 22, 13@11:21:57

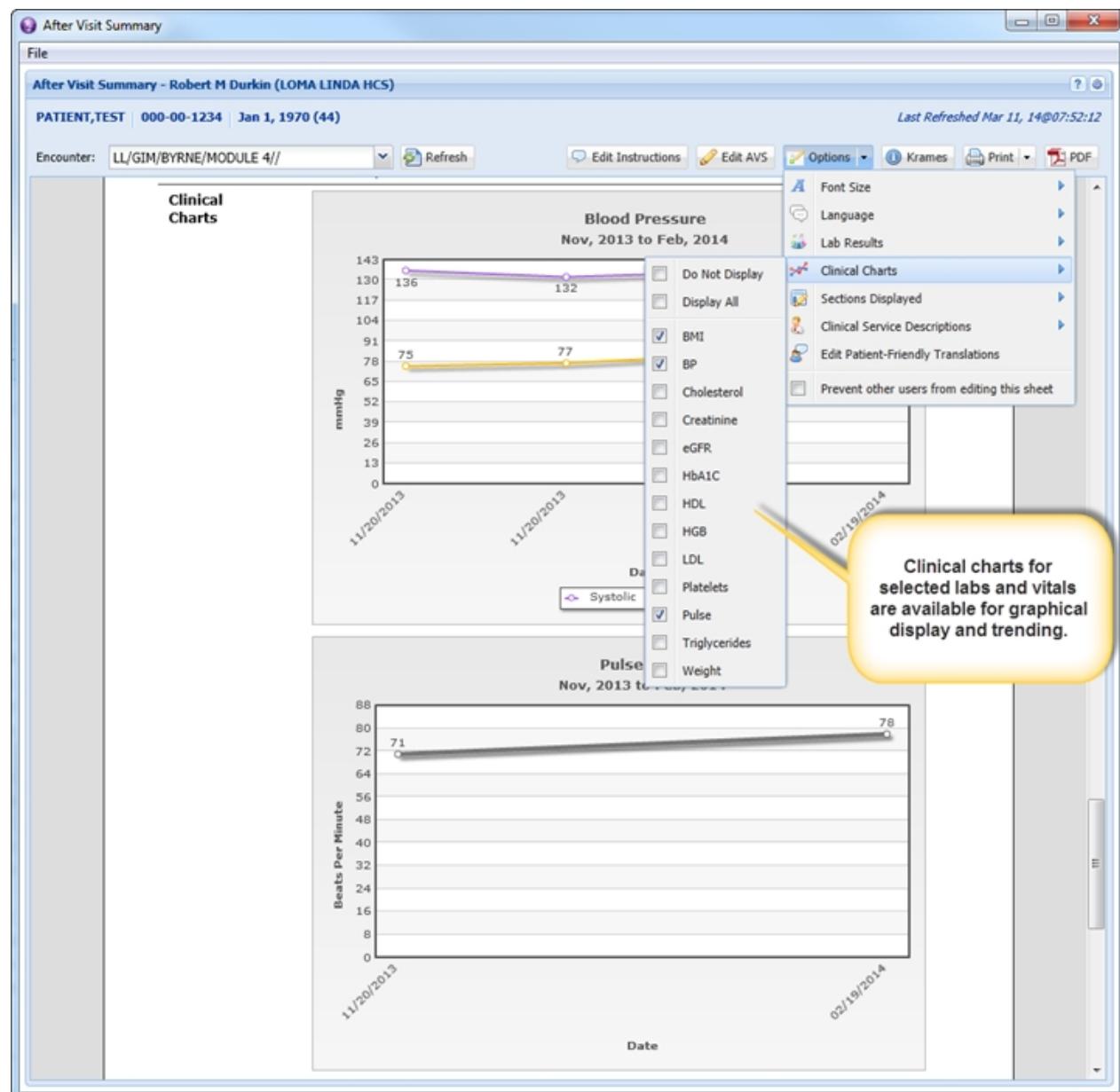
Encounter: LL/GIM/BYRNE/MODULE 4//

Recent Lab Results

Test name	Result	units	Ref.	range	Site Code
HEMOGLOBIN A1C (LAB)	5.9	%		4.2 - 5.9	[605]
Eval: SUGGESTED INTERPRETATION GLYCOSYLATED HEMOGLOBIN RESULTS:					
Eval: HGB A1C OF <6% CONSISTENT WITH NORMAL GLYCEMIA					
Eval: HGB A1C OF 6-8% SUGGESTS ACCEPTABLE GLUCOSE CONTROL					
Eval: HGB A1C OF 8-10% SUGGESTS FAIR GLUCOSE CONTROL					
Eval: HGB A1C OF OVER 10% SUGGESTS POOR GLUCOSE CONTROL					
Eval: RESULTS ADVERSELY Affected BY HGB F >1%, HGB S AND E,					
Eval: AND HOMOZYGOUS HGB S AND C.					
<hr/>					
Report Released Date/Time: Sep 17, 2013@10:00					
Provider: BYRNE, JOHN M					
Specimen: SERUM. DX 0917 612					
Specimen Collection Date: Sep 17, 2013@10:00					
Test name	Result	units	Ref.	range	Site Code
SODIUM	137	mEq/L		136 - 144	[605]
POTASSIUM	4.1	mEq/L		3.6 - 5.1	[605]
CHLORIDE	98	L		101 - 111	[605]
CO2	30.0	mEq/L		22 - 32	[605]
UREA NITROGEN	20	mg/dL		8 - 20	[605]
CREATININE	1.08	mg/dL		.66 - 1.27	[605]
eGFR	>60	ml/min	Ref:	>=60	[605]
Eval: eGFR is calculated by 4-variable MDRD equation of Levey modified for					
Eval: standardized creatinine. Stable creatinine presumed - ignore eGFR in					
Eval: dialysis patients. Interpret with caution in patients with acute renal					
Eval: failure. Units for eGFR are in mL/min/1.73 square meters.					
GLUCOSE	80	mg/dL		74 - 118	[605]
CALCIUM	9.4	mg/dL		8.9 - 10.3	[605]
PROTEIN TOTAL	6.6	gm/dL		6.1 - 7.9	[605]
ALBUMIN	4.1	gm/dL		3.5 - 4.8	[605]
TOT. BILIRUBIN	0.8	mg/dL		0.2 - 1.2	[605]
DIR. BILIRUBIN	0.10	mg/dL		0.1 - 0.5	[605]
ALKALINE PHOSPHATASE	69	IU/L		32 - 91	[605]
ALT	19	IU/L		17 - 63	[605]
Eval: New sexed reference ranges in effect as of 6/7/13.					
AST	24	IU/L		15 - 41	[605]
CHOLESTEROL	133	mg/dL		0 - 200	[605]
Eval: BORDERLINE ELEVATED: 201-239 mg/dL					
Eval: ELEVATED: OVER 240 mg/dL					
TRIGLYCERIDES	203	H mg/dL		0 - 150	[605]
Eval:					
Eval: BORDERLINE: 150-199 mg/dL					

Clinical Charts

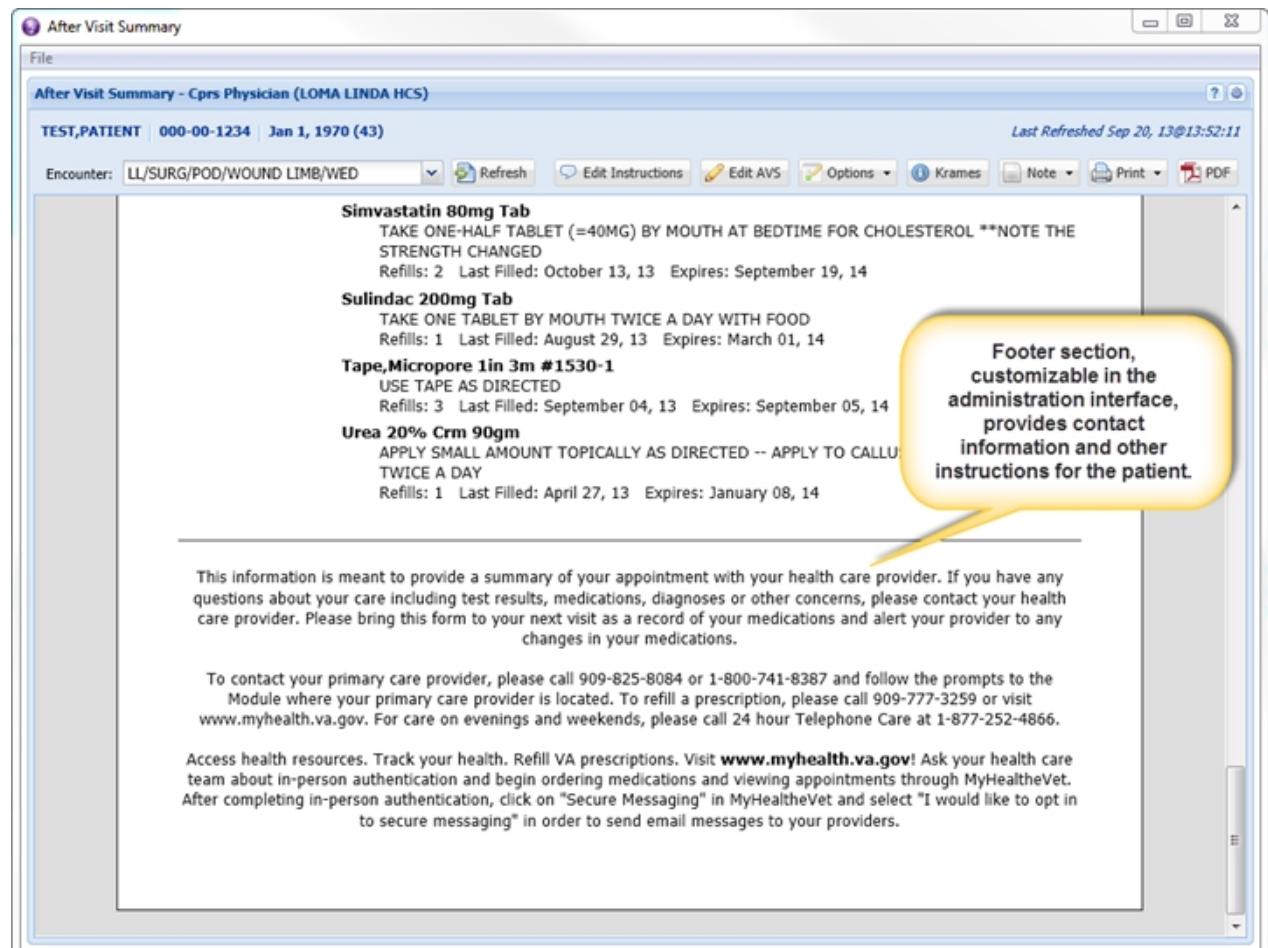
Clinical charts may be optionally included in the AVS. The charts are all line graphs and reflect the lab data and vital signs over the past year for the patient. Clinical charts that are available include BMI, BP, Cholesterol, Creatinine, eGFR, HbA1C, HDL, HGB, LDL, Platelets, Pulse, Triglycerides, and Weight.



Footer

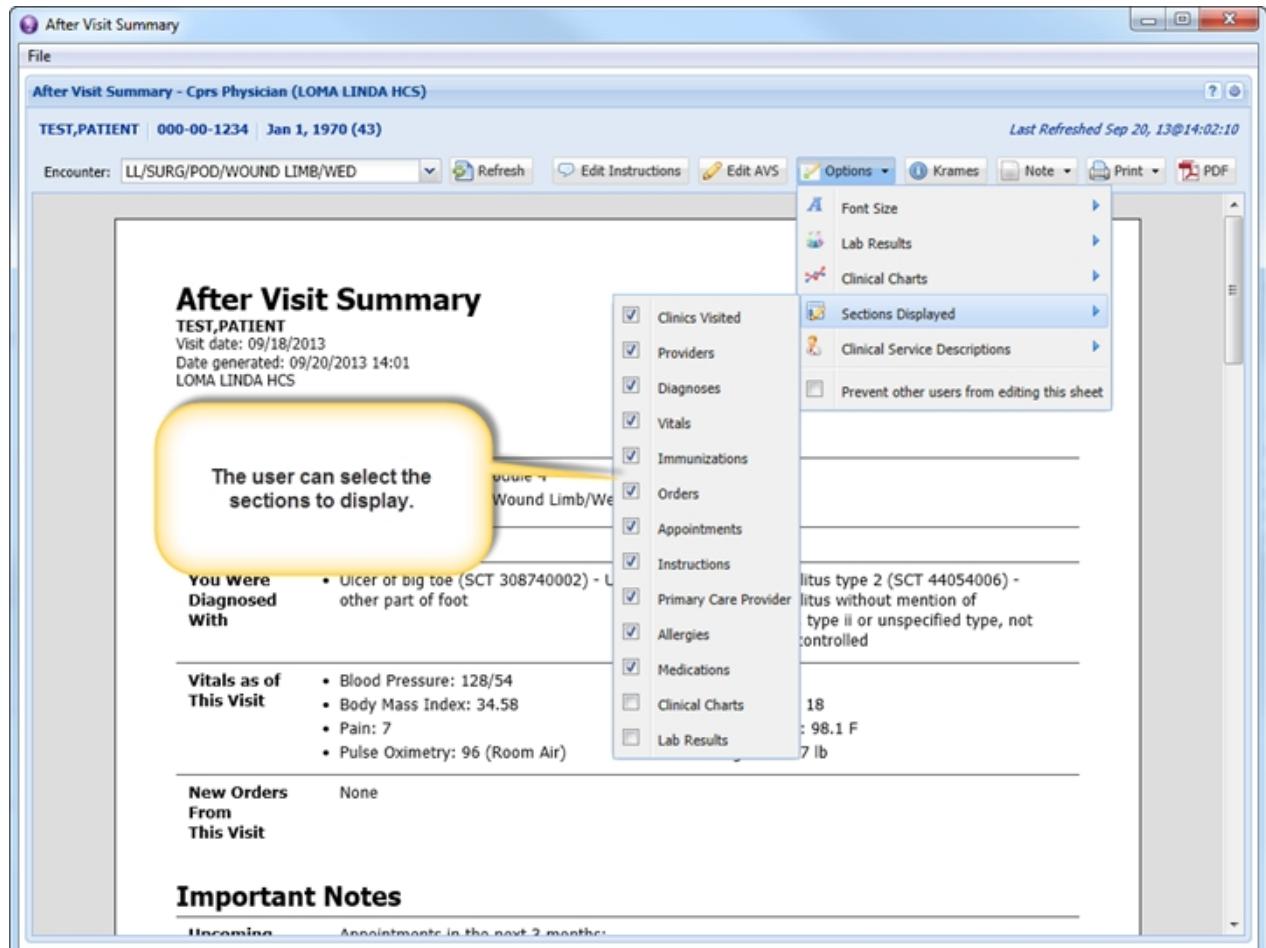
The following screen capture shows the footer section, which can be customized for the facility.

The footer contents, along with the header and facility, clinic, and provider disclaimers, may be customized in the administration interface.



Toggling Sections

The sections that appear on the AVS can be toggled on or off by selecting the sections to display from the drop-down menu.



AVS Functionality

The details of the functionality of the AVS is described in the topics that comprise this section.

Medication Reconciliation

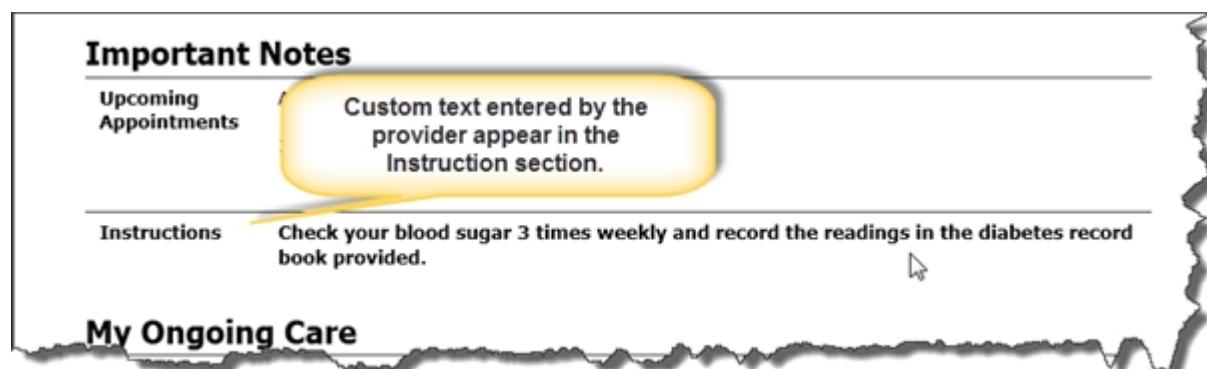
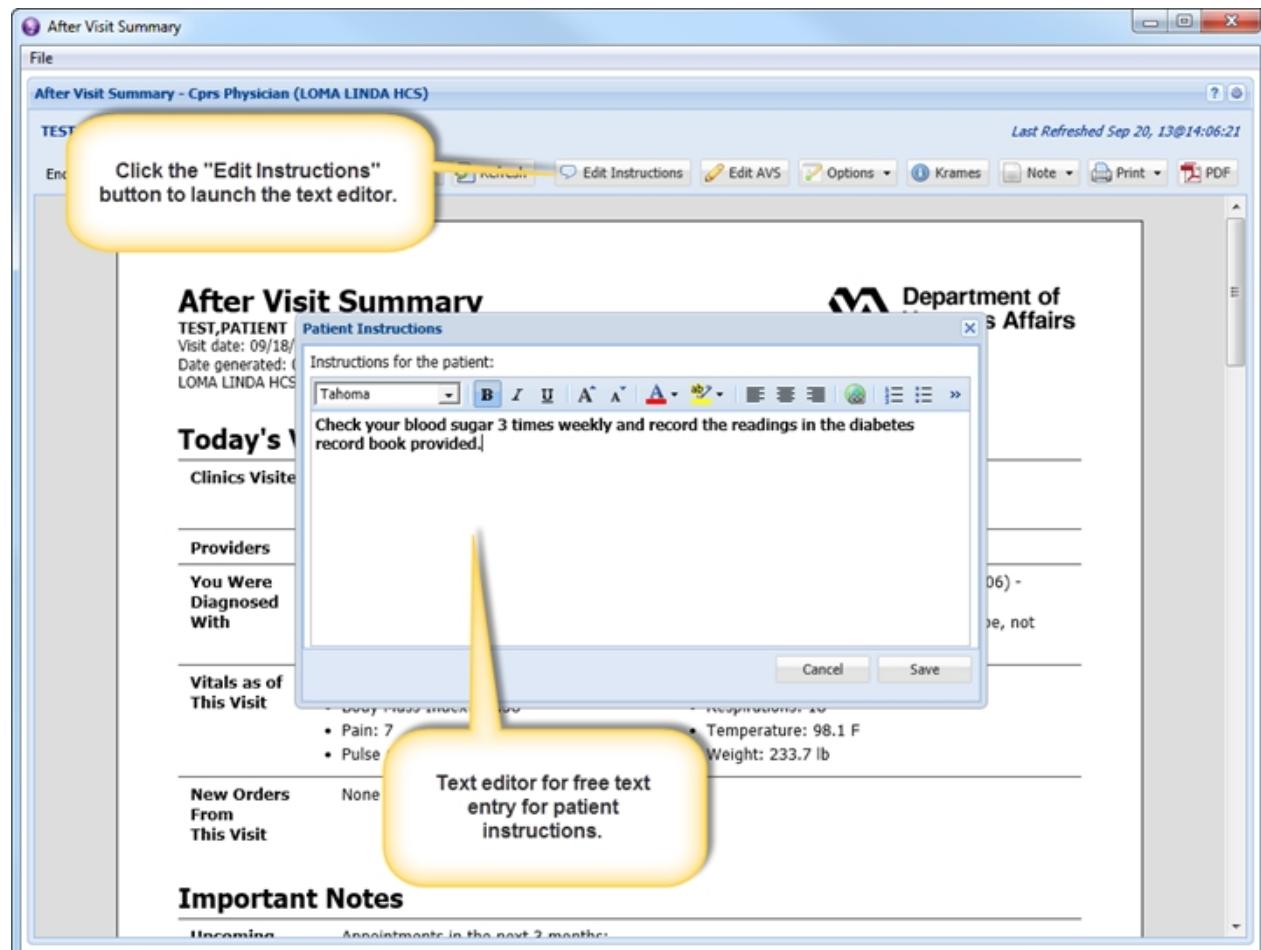
Medications imported from other VA facilities, including VA-prescribed and non-VA medications, are reconciled by the provider. The provider selects those meds in the list that the patient reports he/she is still taking. The medication lists as displayed in the AVS will be categorized according to those that the patient is taking and not taking.

The screenshot shows the 'After Visit Summary' window with the title bar 'After Visit Summary'. The main area displays a list of medications under the heading 'Remote Medications'. A message at the top of the list reads: 'This patient has medications from other VA facilities. Please select the medications from the list below that the patient is currently taking.' Below this message is a table listing medications with columns for Name, Sig, Type, Refills, Expiration Date, Last Filled, Facility, and Provider/Documentor. Several medications have checkboxes next to them, indicating they are being selected. A yellow callout bubble points to the list with the text: 'Remote VA and Non-VA medications are displayed in this dialog. The provider reconciles these medications by selecting those medications that the patient is taking as prescribed.' At the bottom right of the dialog is a 'Continue' button.

Name	Sig	Type	Refills	Expiration Date	Last Filled	Facility	Provider/Documentor
<input checked="" type="checkbox"/> Tiotropium 18 Mcg In...	INHALE CONTENTS OF ONE CAPSULE IN...	VA	0	January 17, 2...	January 08, 2...	PUGET SOUND HCS	ERSKINE,MICHAEL S
<input checked="" type="checkbox"/> Albuterol 90mcg (Cfc-...	INHALE 2 PUFFS 90MCG/INHL BY MOUT...	VA	0	January 14, 2...	January 06, 2...	PUGET SOUND HCS	ERSKINE,MICHAEL S
<input type="checkbox"/> Budesonide 160/Form...	INHALE TWO PUFFS BY MOUTH TWICE...	VA	0	January 17, 2...	January 05, 2...	PUGET SOUND HCS	ERSKINE,MICHAEL S
<input type="checkbox"/> Adalimumab 40mg/0...	INJECT 40 MG (0.8 ML) OF 40MG/0.8ML...	VA	0	January 17, 2...	January 23, 2...	PUGET SOUND HCS	ERSKINE,MICHAEL S
<input checked="" type="checkbox"/> Hydrochlorothiazide 2...	TAKE ONE TABLET BY MOUTH EVERY M...	VA	0	January 17, 2...	January 21, 2...	PUGET SOUND HCS	ERSKINE,MICHAEL S
<input checked="" type="checkbox"/> Cetirizine 10 Mg Tab	TAKE ONE-HALF TABLET BY MOUTH EVE...	VA	0	January 14, 2...	January 16, 2...	PUGET SOUND HCS	ERSKINE,MICHAEL S
<input checked="" type="checkbox"/> Flunisolide 0.025% 20...	INHALE 2 SPRAYS IN EACH NOSTRIL T...	VA	0	January 14, 2...	January 16, 2...	PUGET SOUND HCS	ERSKINE,MICHAEL S
<input type="checkbox"/> Leflunomide 20 Mg Tab	TAKE ONE TABLET BY MOUTH EVERY D...	VA	0	January 14, 2...	January 16, 2...	PUGET SOUND HCS	ERSKINE,MICHAEL S
<input type="checkbox"/> Lorazepam 0.5 Mg Tab	TAKE ONE TABLET BY MOUTH EVERY D...	VA	0	January 15, 2...	January 16, 2...	PUGET SOUND HCS	ERSKINE,MICHAEL S
<input type="checkbox"/> Sharps Disposal Cont...	USE CONTAINER AS DIRECTED DO NOT...	VA	0	January 14, 2...	January 16, 2...	PUGET SOUND HCS	ERSKINE,MICHAEL S
<input checked="" type="checkbox"/> Ranitidine Tab	150 MG BY MOUTH EVERY DAY	Non-VA	0			PUGET SOUND HCS	LIEDTKE,ANTHON...
<input type="checkbox"/> Etanercept 50 Mg/Ml...	SUBCUTANEOUSLY WEEKLY	Non-VA	0			PUGET SOUND HCS	LIEDTKE,ANTHON...

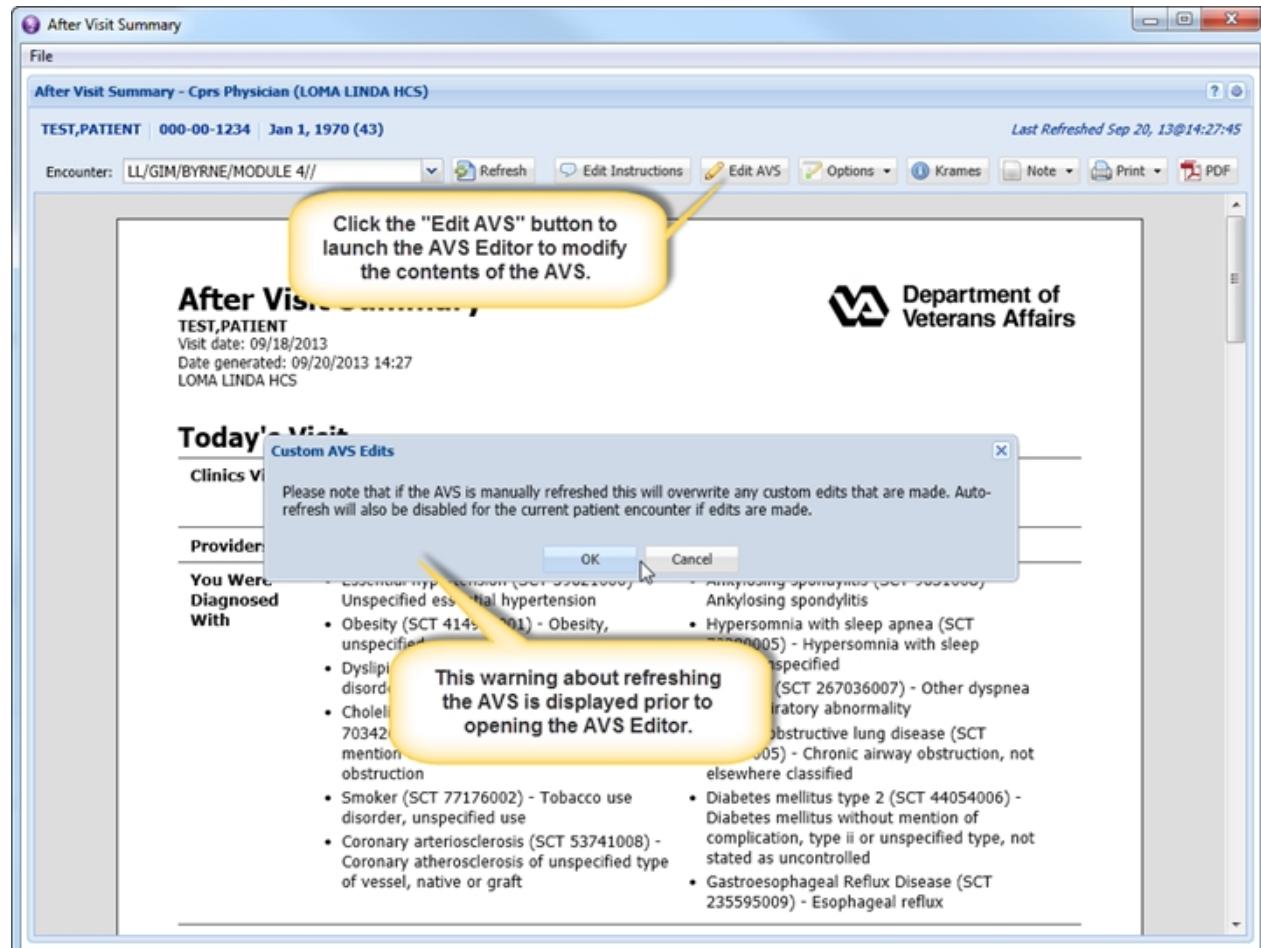
Patient Instructions

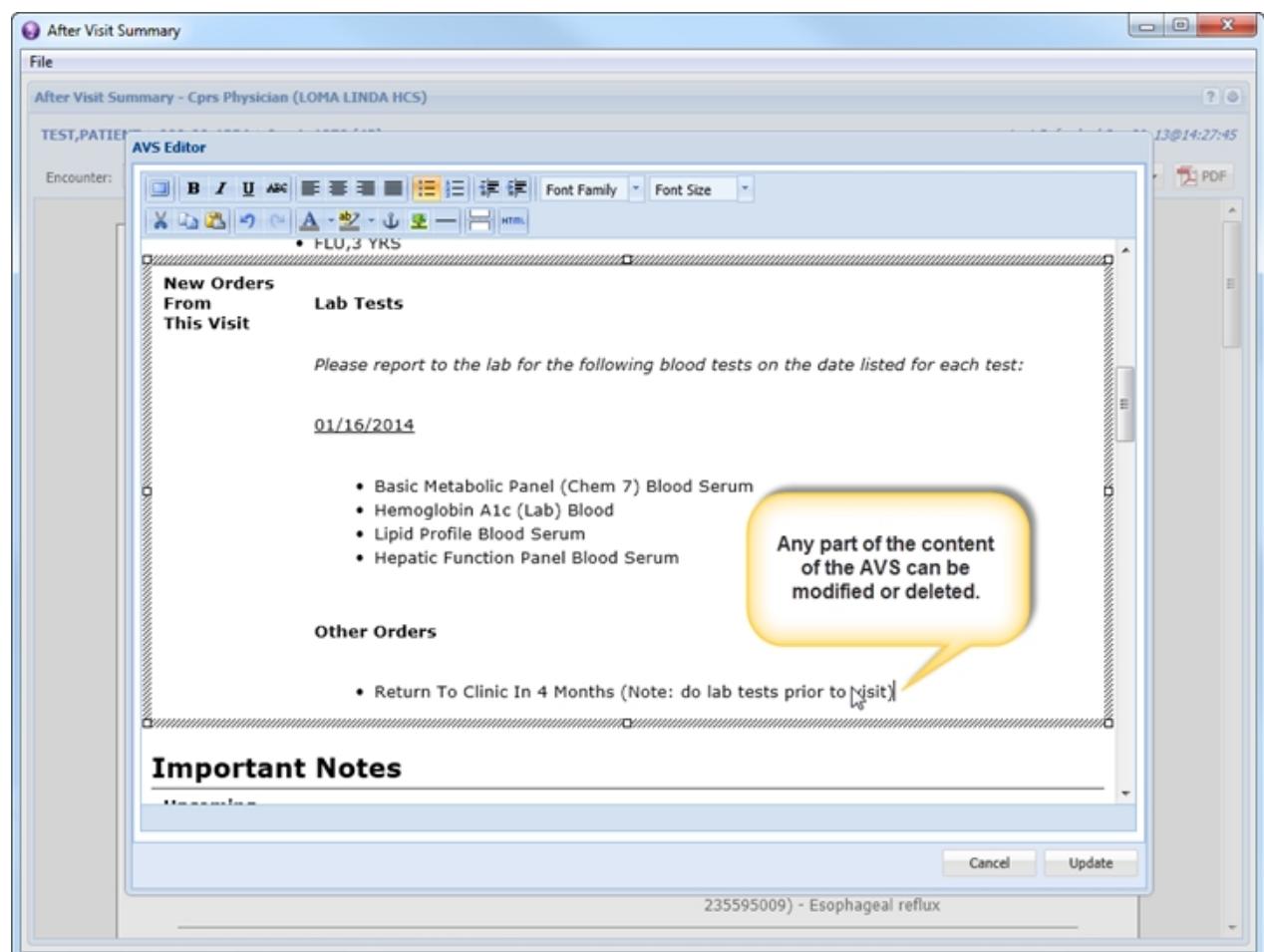
Free-text patient instructions may be entered into the AVS. Rich text options are supported, including font style, size, color, and formatting. Images may be inserted into the text (e.g. from Krames-on-Demand), and bulleted and sorted lists may also be inserted into the text.



Edit AVS

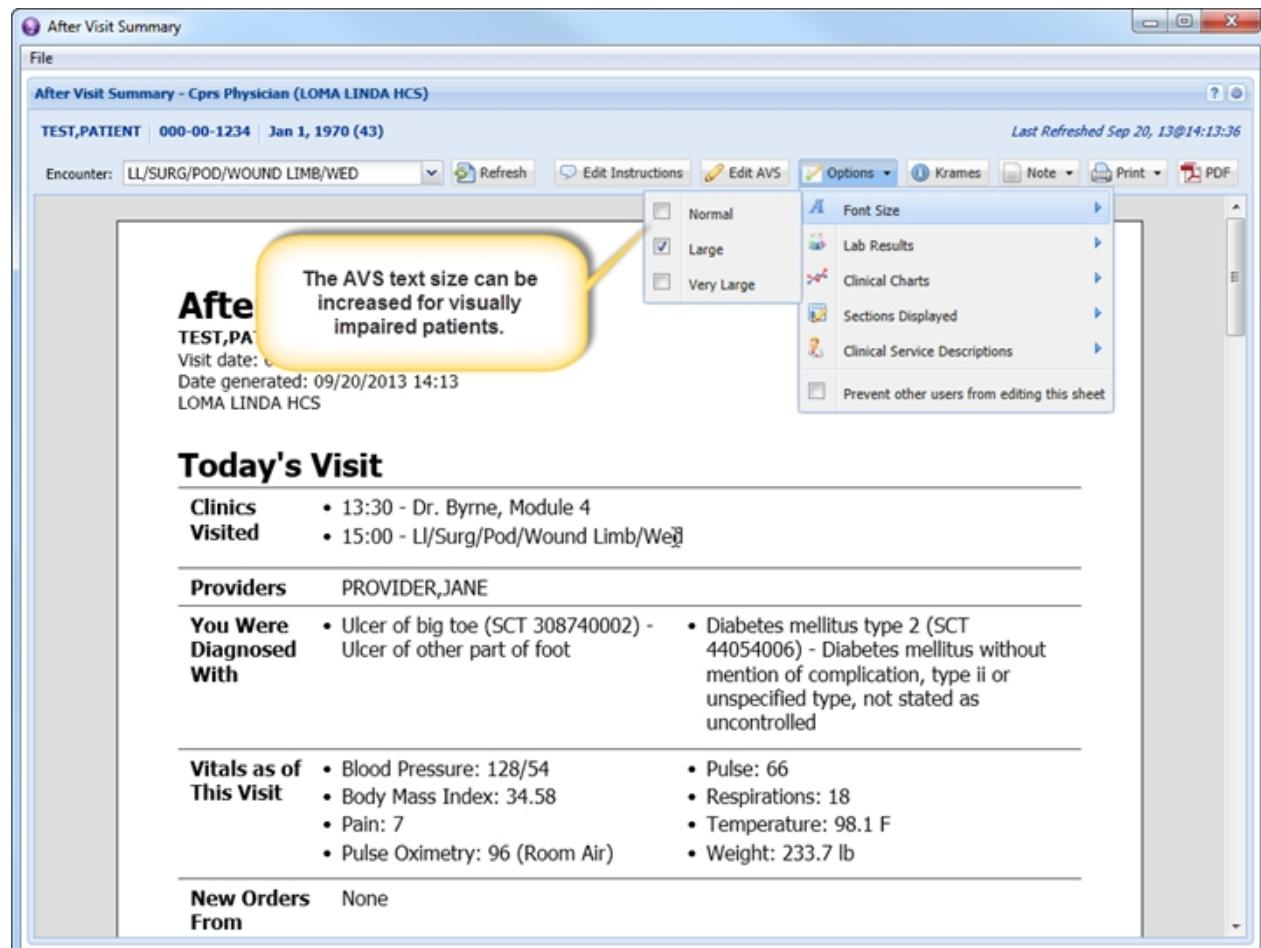
The user can add/modify/delete any of the content in the AVS in a pop-up editor. A notification is made to the user that manually refreshing the AVS will overwrite any custom edits, and auto-refresh is turned off for the patient encounter if edits are made.





Font Size

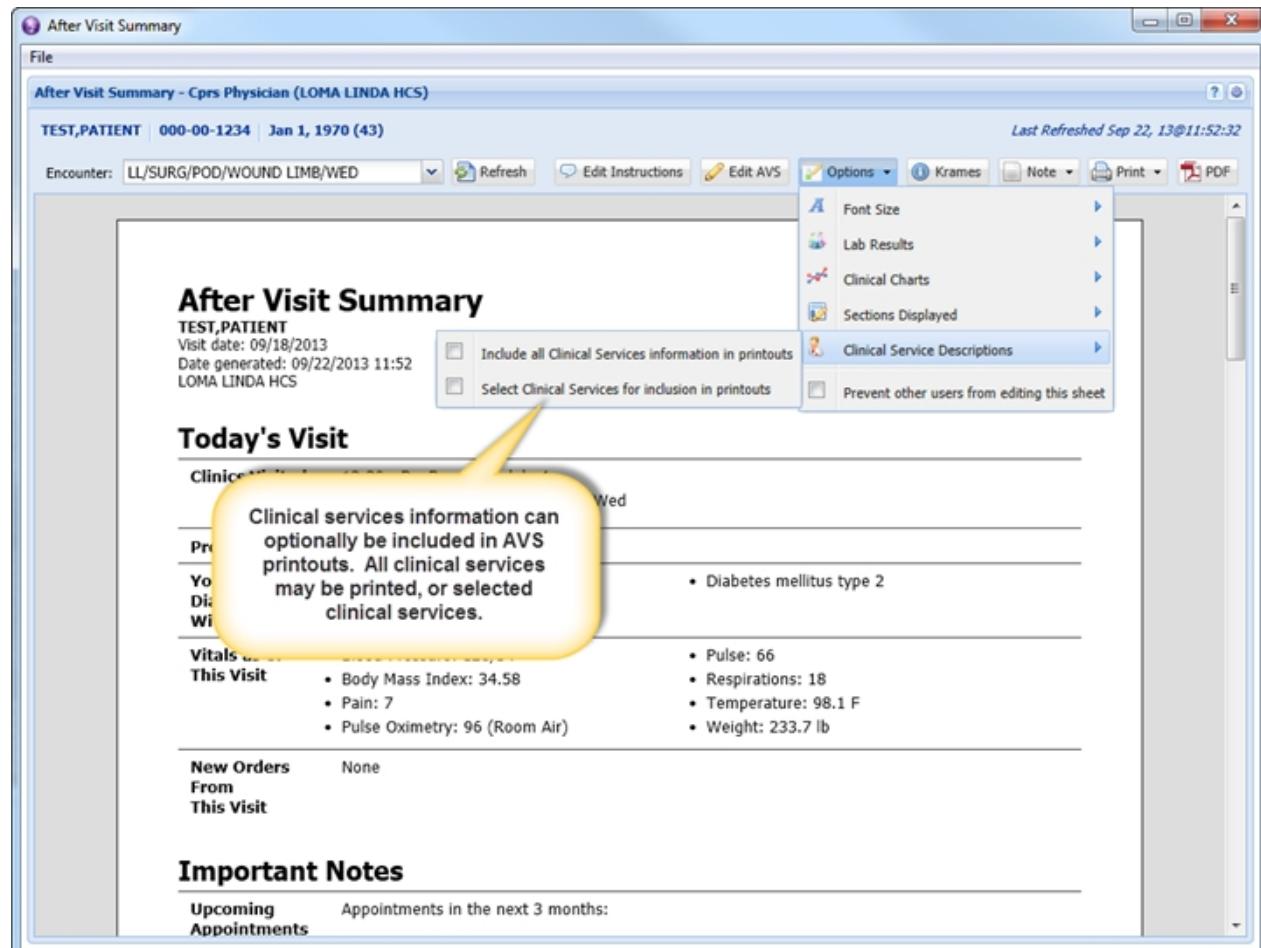
For visually-impaired patients, the font size of the AVS may be adjusted. AVS supports large and very large font sizes in addition to the normal-sized text that is displayed by default.

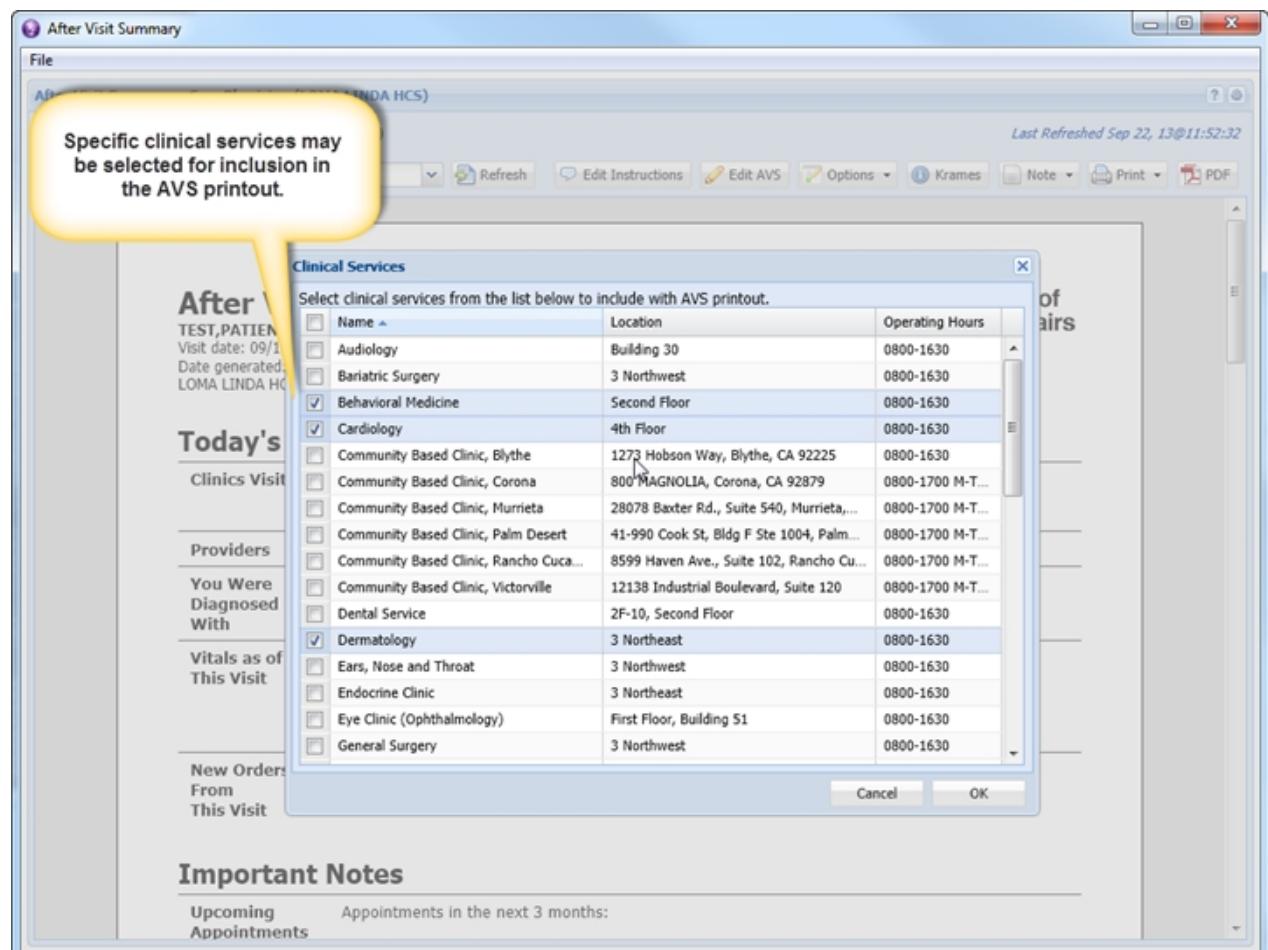


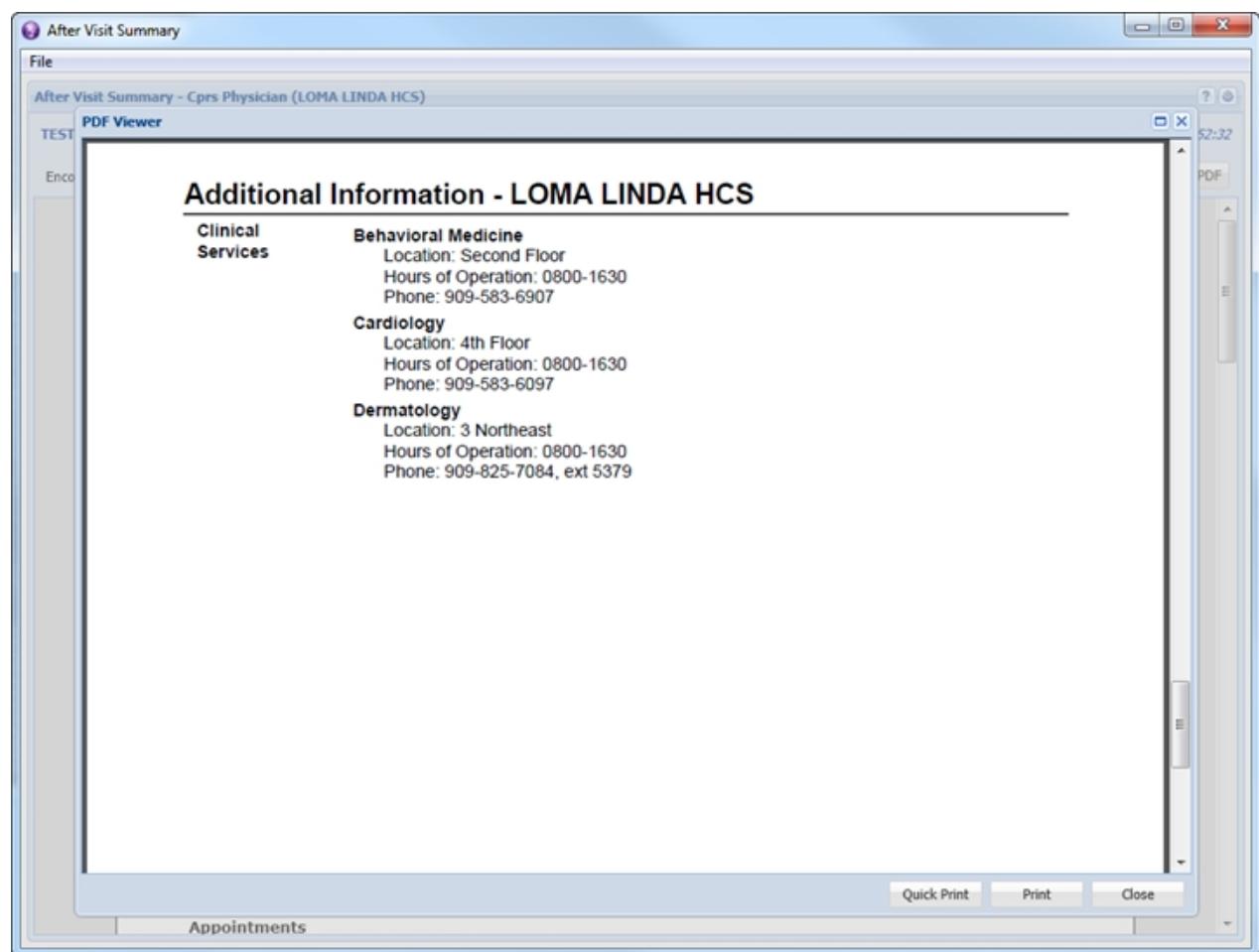
Clinical Services Information

Clinical Services information, including the name, location, phone, hours of operation, and comments, may be printed out along with the AVS document to provide the patient with helpful information regarding clinical services that he/she may visit during an upcoming appointment.

The user can toggle the inclusion of clinical services information from the Options menu. All clinical services may be printed out, or selected services may be chosen from the list.





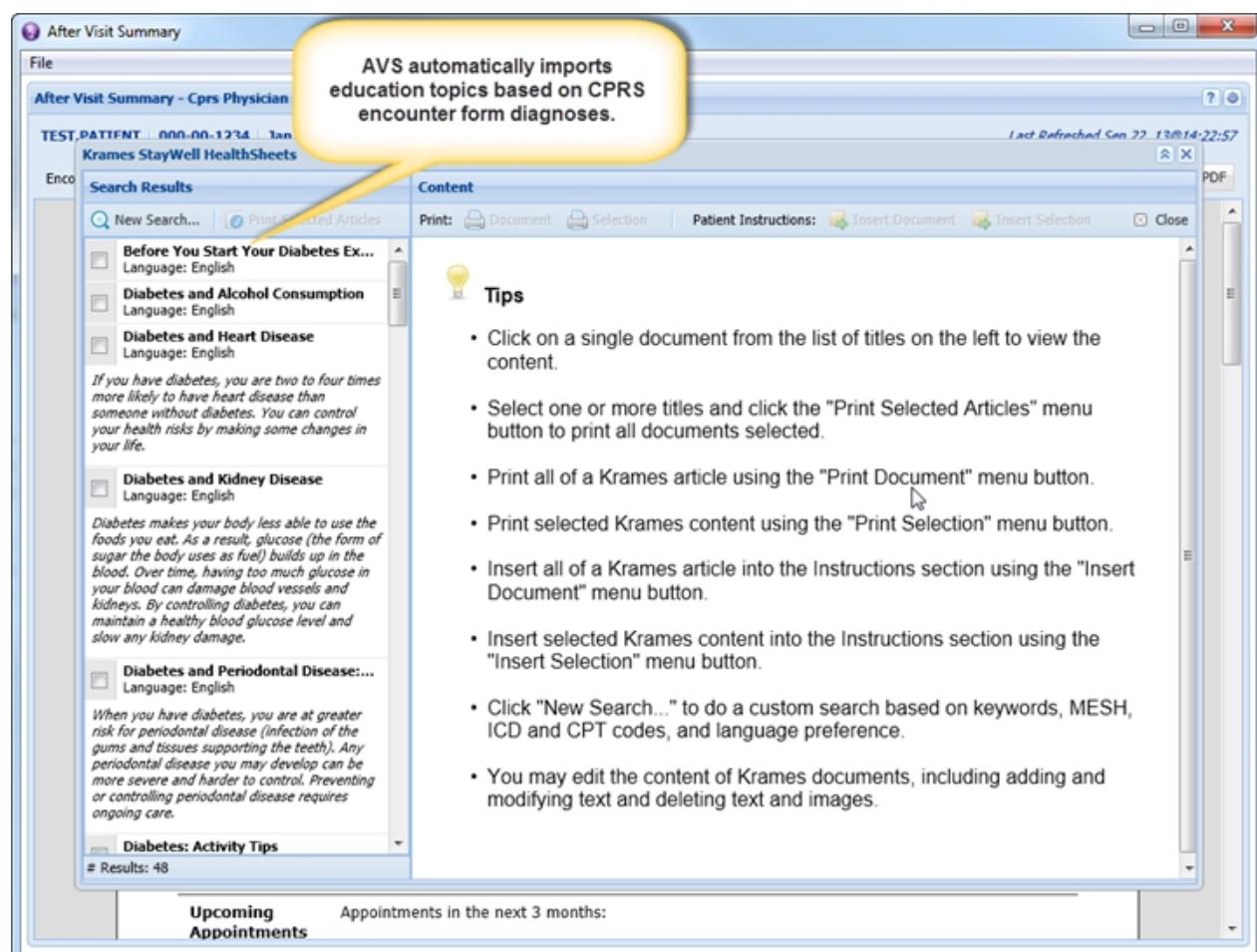


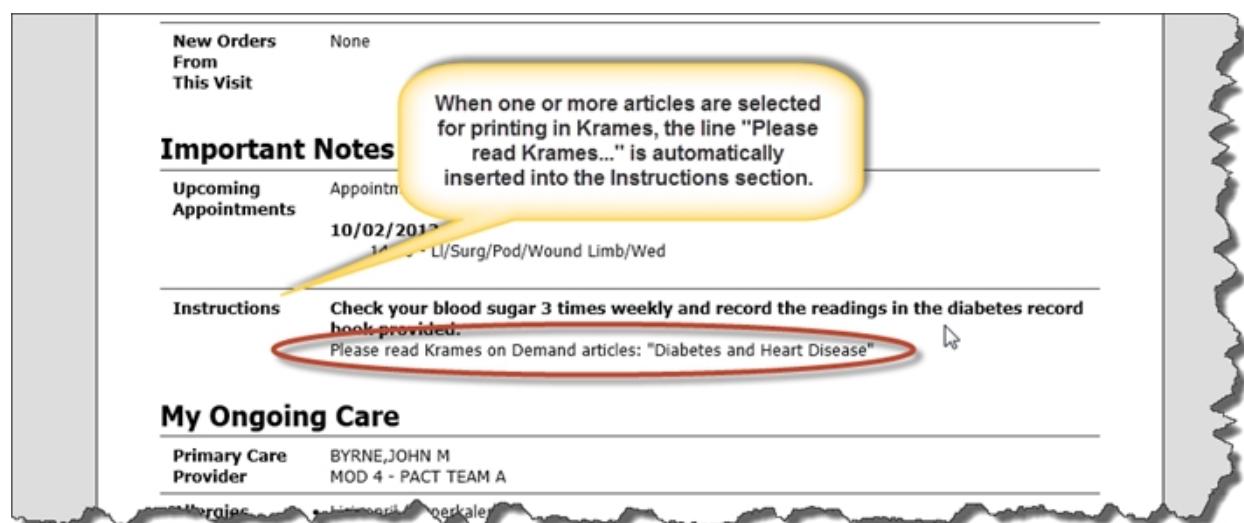
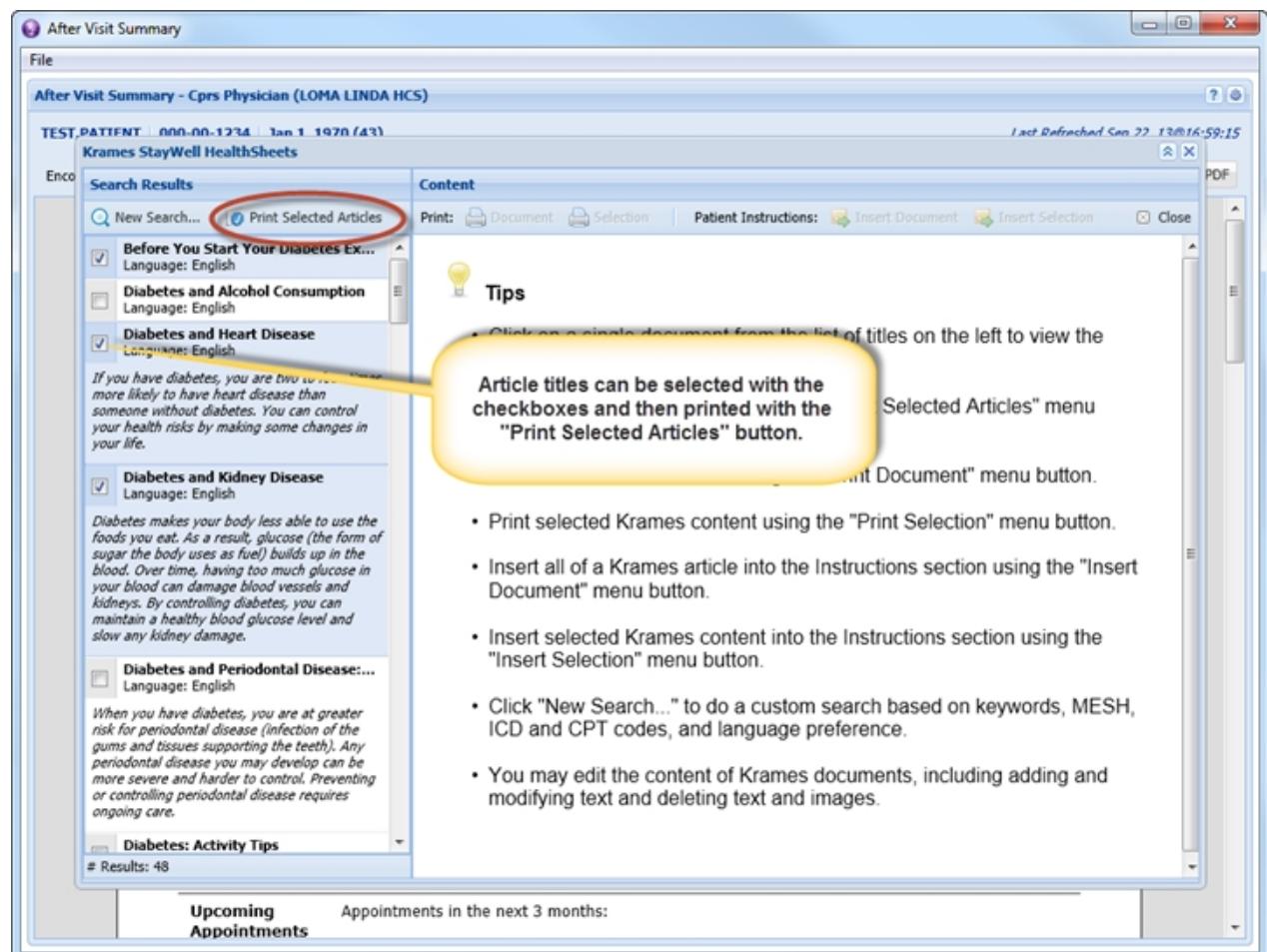
Krames On Demand

Select the "Krames" button from the AVS toolbar to open Krames-on-Demand patient education material.

When it is first opened for a patient, the Krames interface will automatically search the Krames database for patient education content based upon the patient's diagnoses from the encounter form. The user may also perform a manual search which supports queries for Krames content based on keywords, MESH codes, ICD-9 codes, and CPT codes. The patient's preferred language may also be selected on the search form.

The user can select multiple documents from the Search Results displayed on the left side of the screen and choose to import them all into the Patient Instructions section of the AVS or printed off as separate documents. Parts of a Krames article may be selected and inserted into the AVS or printed separately.





After Visit Summary

File

After Visit Summary - Cprs Physician (LOMA LINDA HCS)

TEST PATIENT | 000-00-1234 | Jan 1, 1970 (43) Last Refreshed: Sun, 22, 13@16:59:15

Krames StayWell HealthSheets

Encounters

Search Results Content

New Search... Print Selected Articles

Print: Document Selection Patient Instructions: Insert Document Insert Selection Close PDF

Diabetes and Heart Disease

If you have diabetes, you are two to four times more likely to have heart disease than someone without diabetes. This is because most people with diabetes also have the main risk factors for heart disease. But there's good news. You can help control your health risk by making some changes in your life.

Diabetes and Kidney Disease

A single article may be selected for display by clicking on the article title. The document may then be printed or inserted into the AVS Instructions section.

When you have diabetes, you are at greater risk for periodontal disease (infection of the gums and tissues supporting the teeth). Any periodontal disease you may develop can be more severe and harder to control. Preventing or controlling periodontal disease requires ongoing care.

Diabetes: Activity Tips

Results: 48

Upcoming Appointments Appointments in the next 3 months:



Your main risk factors

Three major risk factors for heart disease are high blood sugar, high blood pressure, and high levels of lipids. By keeping risk factors under control, you can help keep your heart and arteries healthy. This may reduce your chances of a heart attack.

Krames StayWell HealthSheets

Search Results Content

New Search... Print Selected Articles

Print: Document Selection Patient Instructions: Insert Document Insert Selection Close

Changes you can make

A part of an article that is highlighted for selection by the user may be printed...

...or the selected content may be inserted into the AVS Instructions section.

- Testing your blood sugar is the only way to know whether it is under control. Be sure to test your blood sugar yourself. Also get your blood tested in the lab, as directed.
- Monitoring your blood pressure and lipid levels can help you achieve safe levels. Visit your health care team as scheduled.
- Taking medications as directed can help control blood sugar, blood pressure, blood clotting, and/or cholesterol levels.

Work with your health care team to make changes in your diet, exercise, and other habits. These changes can reduce your risk of diabetes and help you live longer. Try to fit physical activity into your day. It can help you manage your weight and control your blood sugar levels. If you smoke, quit. Smoking can damage your blood vessels and kidneys. By controlling diabetes, you can maintain a healthy blood glucose level and prevent complications.

Diabetes makes your body less able to use the foods you eat. As a result, glucose (the form of sugar the body uses as fuel) builds up in the blood. Over time, having too much glucose in your blood can damage blood vessels and kidneys. By controlling diabetes, you can maintain a healthy blood glucose level and prevent complications.

Krames StayWell HealthSheets

Search Results

New Search... Print Selected Articles

Before You Start Your Diabetes Ex... Language: English

Diabetes and Alcohol Consumption Language: English

Diabetes and Heart Disease Language: English

If you have diabetes, you are two to four times more likely to have heart disease than someone without diabetes. You can control your health risks by making some changes in your life.

Diabetes and Kidney Disease Language: English

Diabetes makes your body less able to use the foods you eat. As a result, glucose (the form of sugar the body uses as fuel) builds up in the blood. Over time, having too much glucose in your blood can damage blood vessels and kidneys. By controlling diabetes, you can maintain a healthy blood glucose level and slow any kidney damage.

Diabetes and Periodontal Disease:... Language: English

When you have diabetes, you are at greater risk for periodontal disease (infection of the gums and tissues supporting the teeth). Any periodontal disease you may develop can be more severe and harder to control. Preventing or controlling periodontal disease requires ongoing care.

Diabetes: Activity Tips

Results: 48

Content

Print: Document Selection Patient Instructions: Insert Document Insert Selection Close

Diabetes and Heart Disease

If you have diabetes, you are two to four times more likely to have heart disease than someone without diabetes. You can control your health risks by making some changes in your life.

Krames Search

Keywords: cardiomyopathy

Logical operator: AND OR

MeSH Codes:

ICD9 Codes:

CPT Codes:

Language: English

Cancel Search

A search function of the entire Krames-on-Demand library is also available.

Your main risk factors

Three major risk factors for heart disease are high blood sugar, high blood pressure, and high levels of lipids. By keeping risk factors under control, you can help keep your heart arteries healthy. This may reduce your chances of a heart attack.

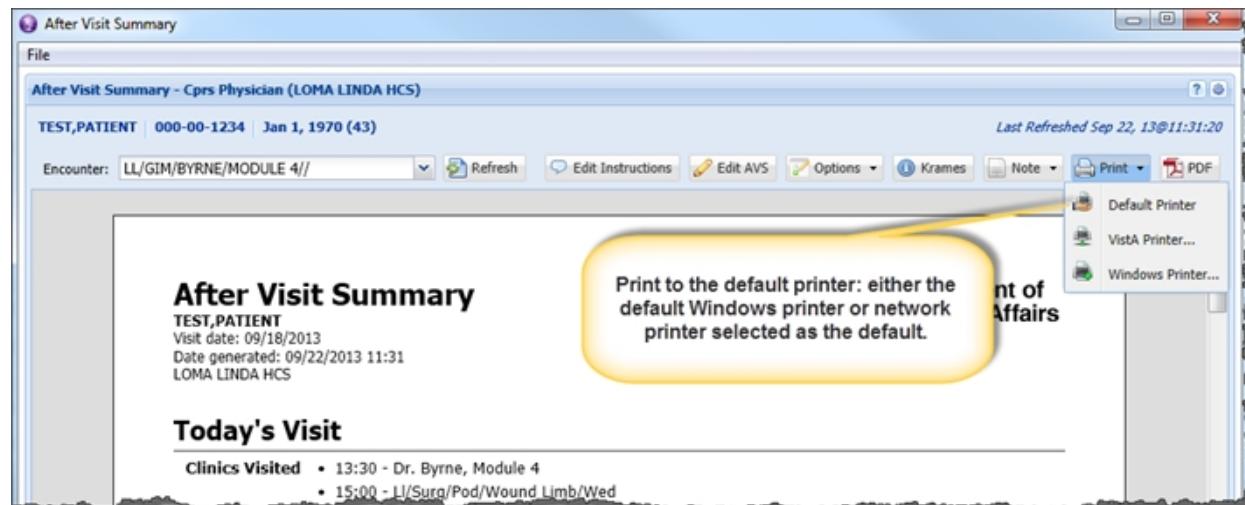
Printing

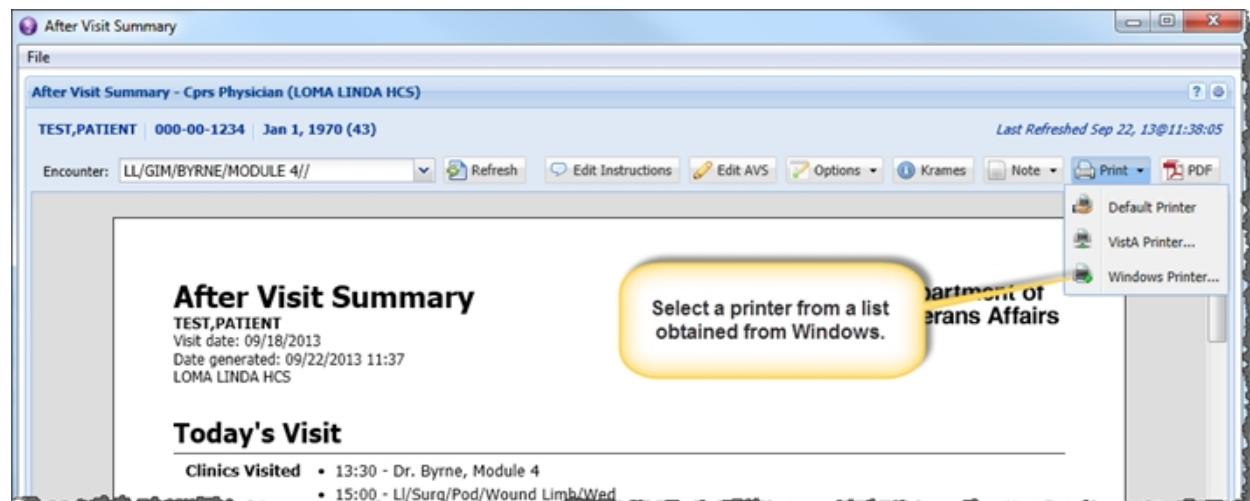
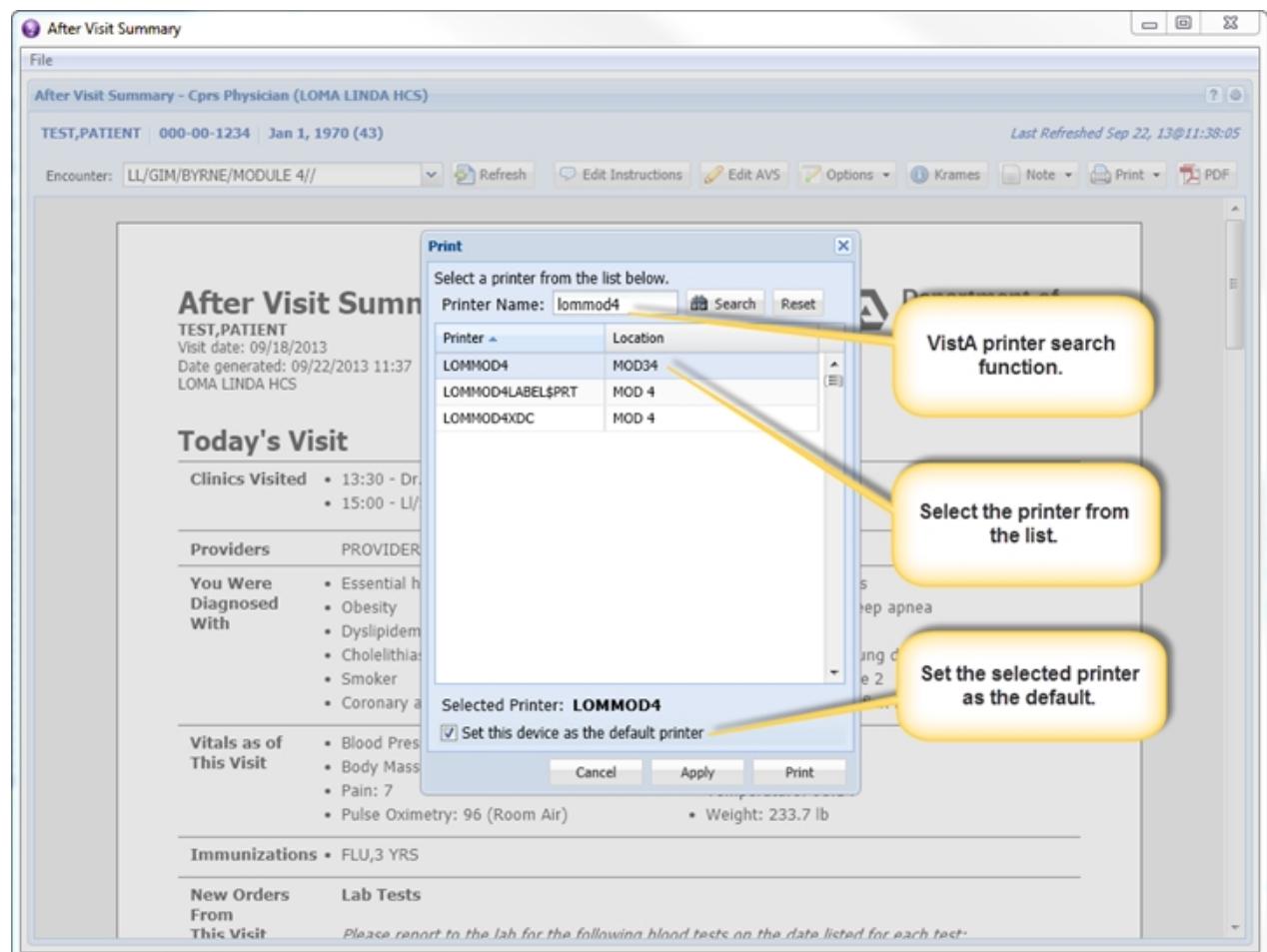
The AVS supports printing to a Windows printer that is connected directly to the user's workstation as well as to a network printer.

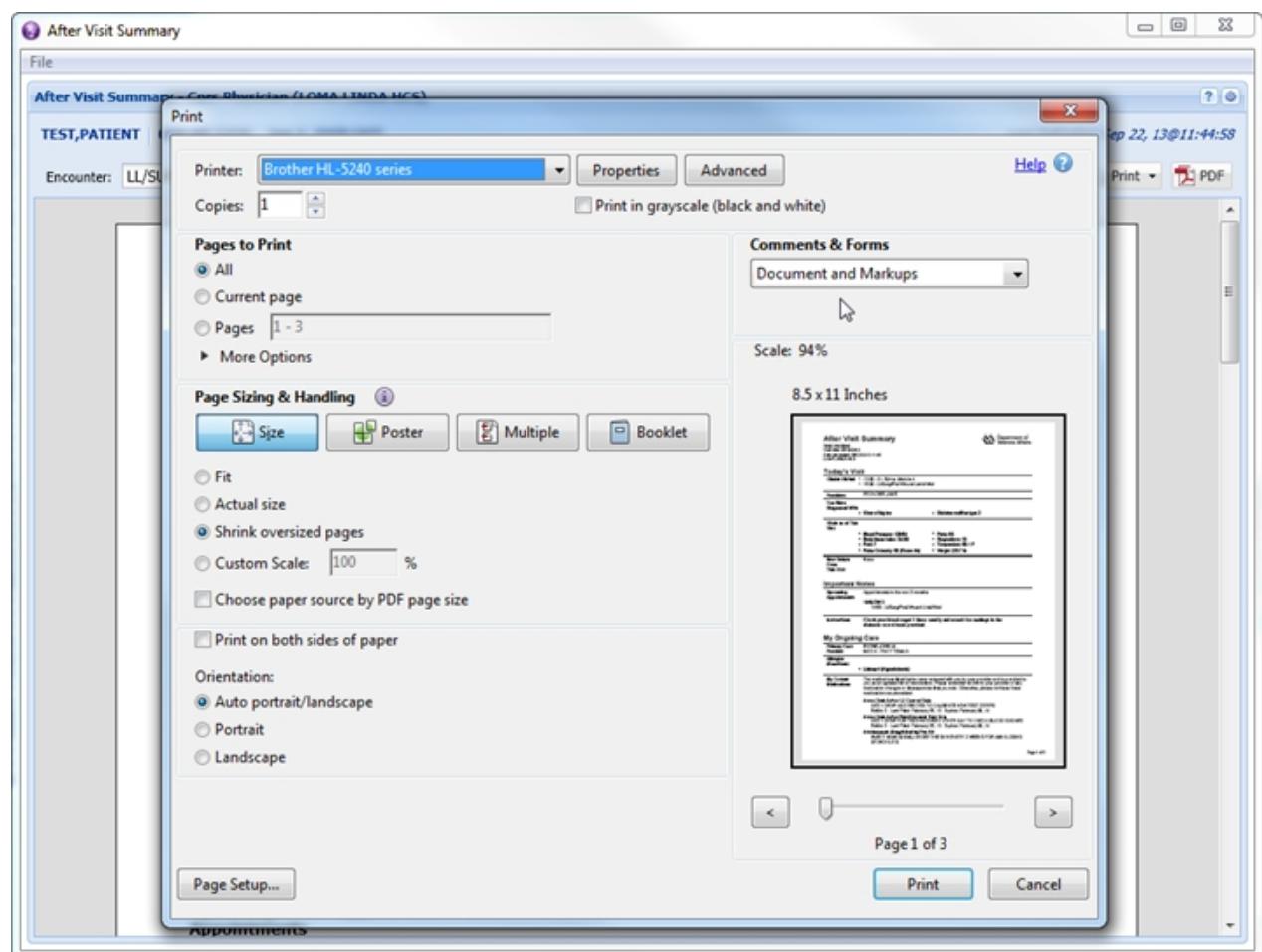
Clicking on the Default Printer option in the Print menu will either print directly to the default Windows printer, or to a network printer ("VistA Printer") that has been selected as the default printer in AVS.

Clicking on the VistA Printer option brings up a dialog that allows the user to select from and search a list of network printers that is obtained from VistA. The user may select a printer from this list as the default printer that AVS will automatically print to when the Default Printer menu option is clicked.

Clicking on the Windows Printer option invokes the standard Windows print dialog that allows the user to print to the default Windows printer or to select from a list of printers installed on the user's workstation.

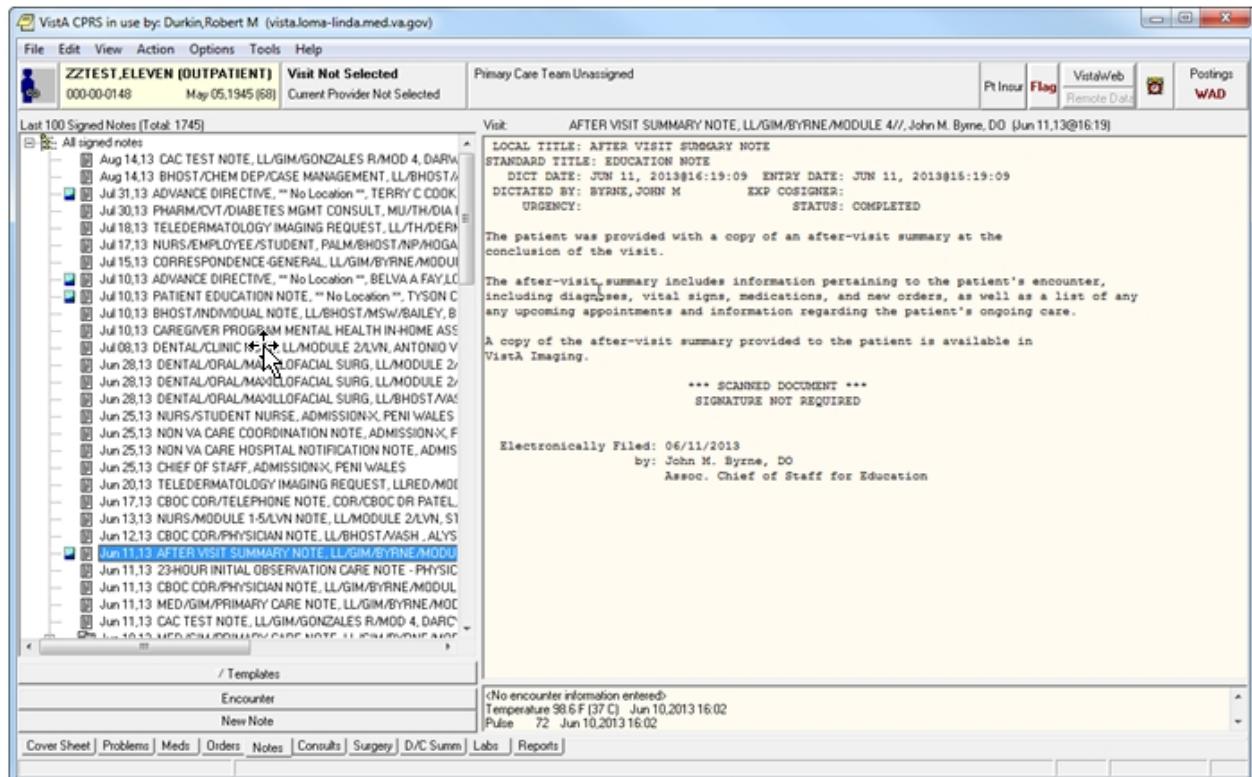


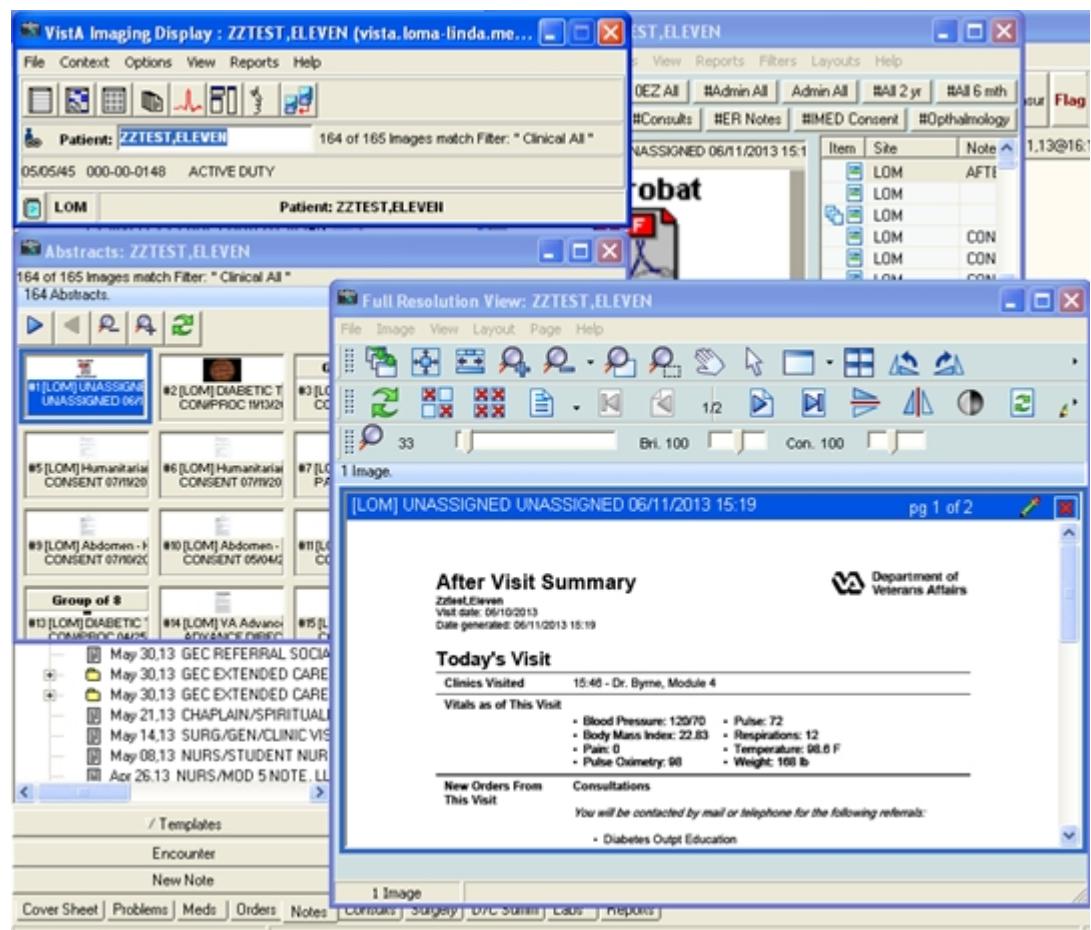




Stub Note and VistA Imaging

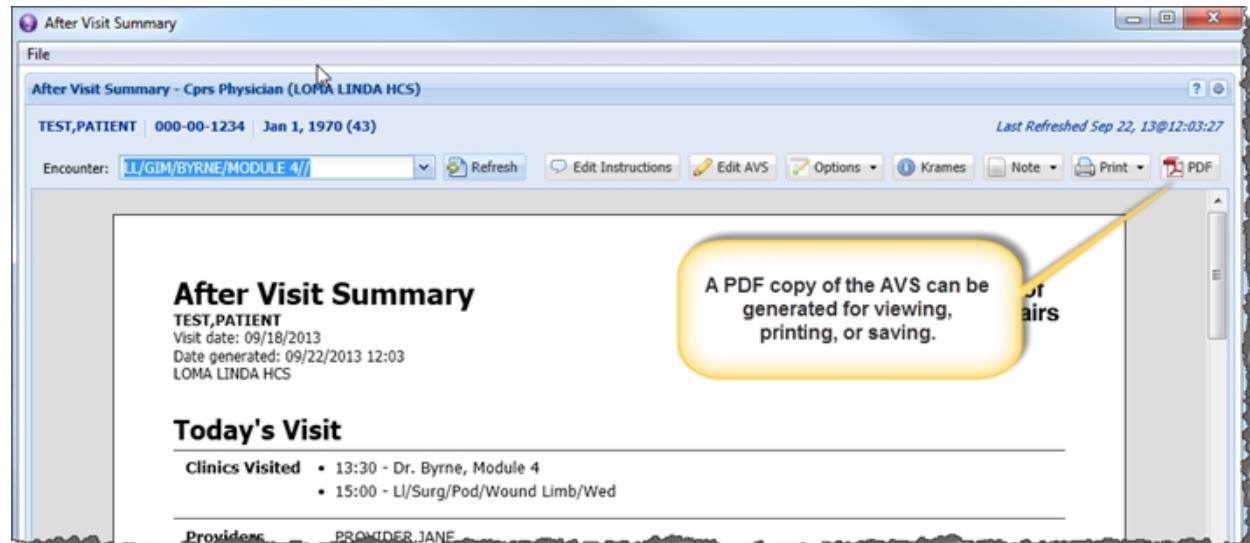
AVS can upload a PDF copy of a patient's AVS to VistA Imaging to be a part of the patient's permanent medical record. This feature works in conjunction with the note creation functionality. A stub note is created which is linked to the document that is saved in VistA Imaging. The VistA Imaging upload occurs automatically in response to the AVS being printed for the first time.





PDF

A PDF copy of the AVS document may be generated and displayed within the AVS interface. The user may optionally print or save the PDF.



This screenshot shows the 'PDF Viewer' window displaying the 'After Visit Summary' document. The document includes the following sections:

- After Visit Summary**
- TEST,PATIENT**
Visit date: 09/18/2013
Date generated: 09/22/2013 12:04
LOMA LINDA HCS
- Today's Visit**
Clinics Visited
 - 13:30 - Dr. Byrne, Module 4
 - 15:00 - Li/Surg/Pod/Wound Limb/Wed
- Providers**
PROVIDER,JANE
- You Were Diagnosed With**
 - Essential hypertension
 - Obesity
 - Dyslipidemia
 - Cholelithiasis without obstruction
 - Smoker
 - Coronary arteriosclerosis
 - Ankylosing spondylitis
 - Hypersomnia with sleep apnea
 - Dyspnea
 - Chronic obstructive lung disease
 - Diabetes mellitus type 2
 - Gastroesophageal Reflux Disease
- Vitals as of This Visit**
 - Blood Pressure: 128/54
 - Body Mass Index: 34.58
 - Pain: 7
 - Pulse Oximetry: 96 (Room Air)
 - Pulse: 66
 - Respirations: 18
 - Temperature: 98.1 F
 - Weight: 233.7 lb
- Immunizations**

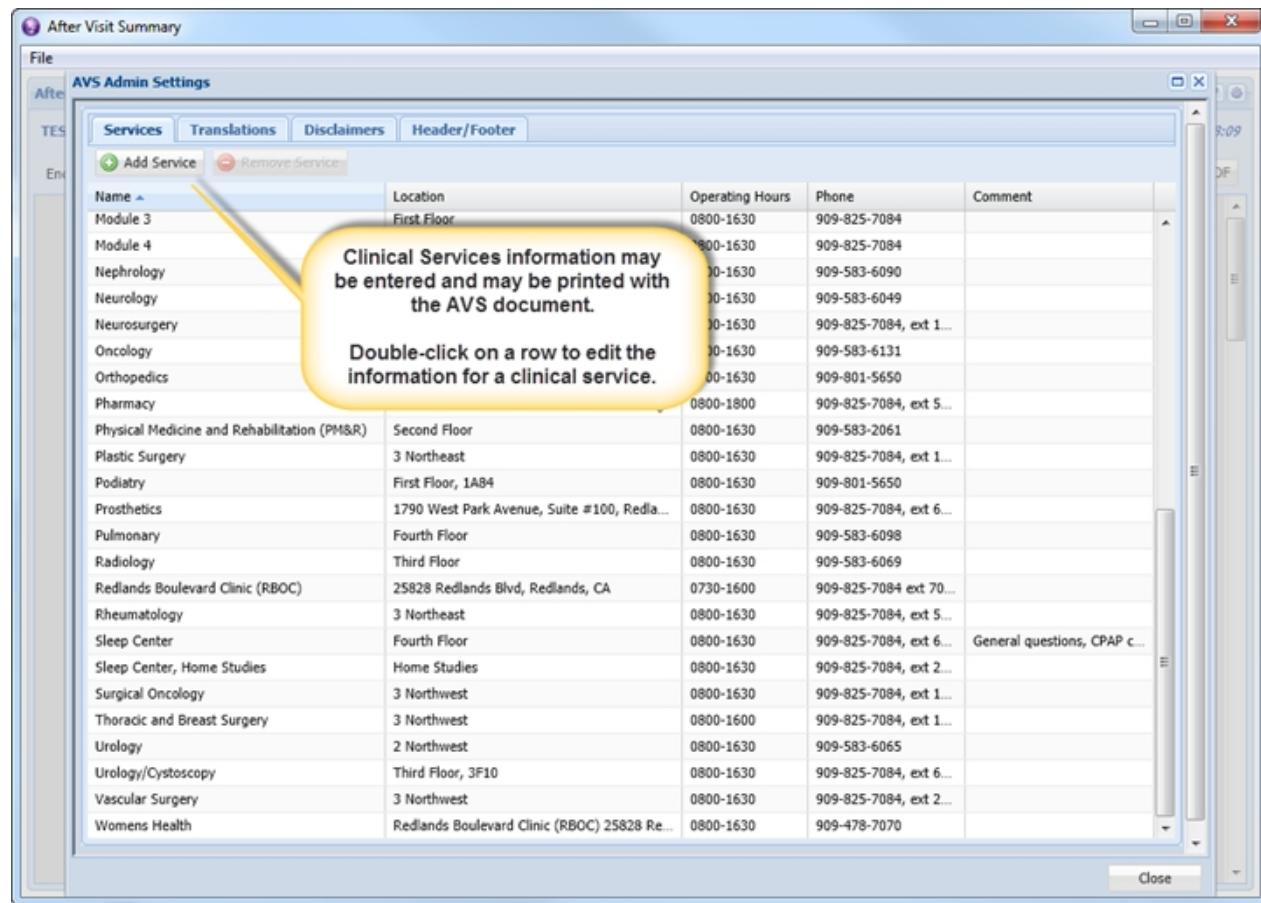
At the bottom of the PDF viewer window, there are buttons for 'Quick Print', 'Print', and 'Close'. A note at the bottom left says 'This Visit' and a note at the bottom right says 'Please report to the lab for the following blood tests on the date listed for each test.'

Admin Settings

The AVS Admin Settings interface allows for customization of the AVS by facility:

- List of clinical service locations and contact information
- Translation of medical terms/orders into patient-friendly text
- Disclaimers
- Header/footer information

Use the Admin Settings interface edit the list of clinical services, which may be printed out with a patient's AVS.



The admin interface also allows the user to provide patient-friendly translations for various pieces of text, such as orders and locations, that appear in the AVS.

After Visit Summary

File AVS Admin Settings

After TES Services Translations Disclaimers Header/Footer

Search Clear Instructions

Translation (Click a cell to edit it)

rtc

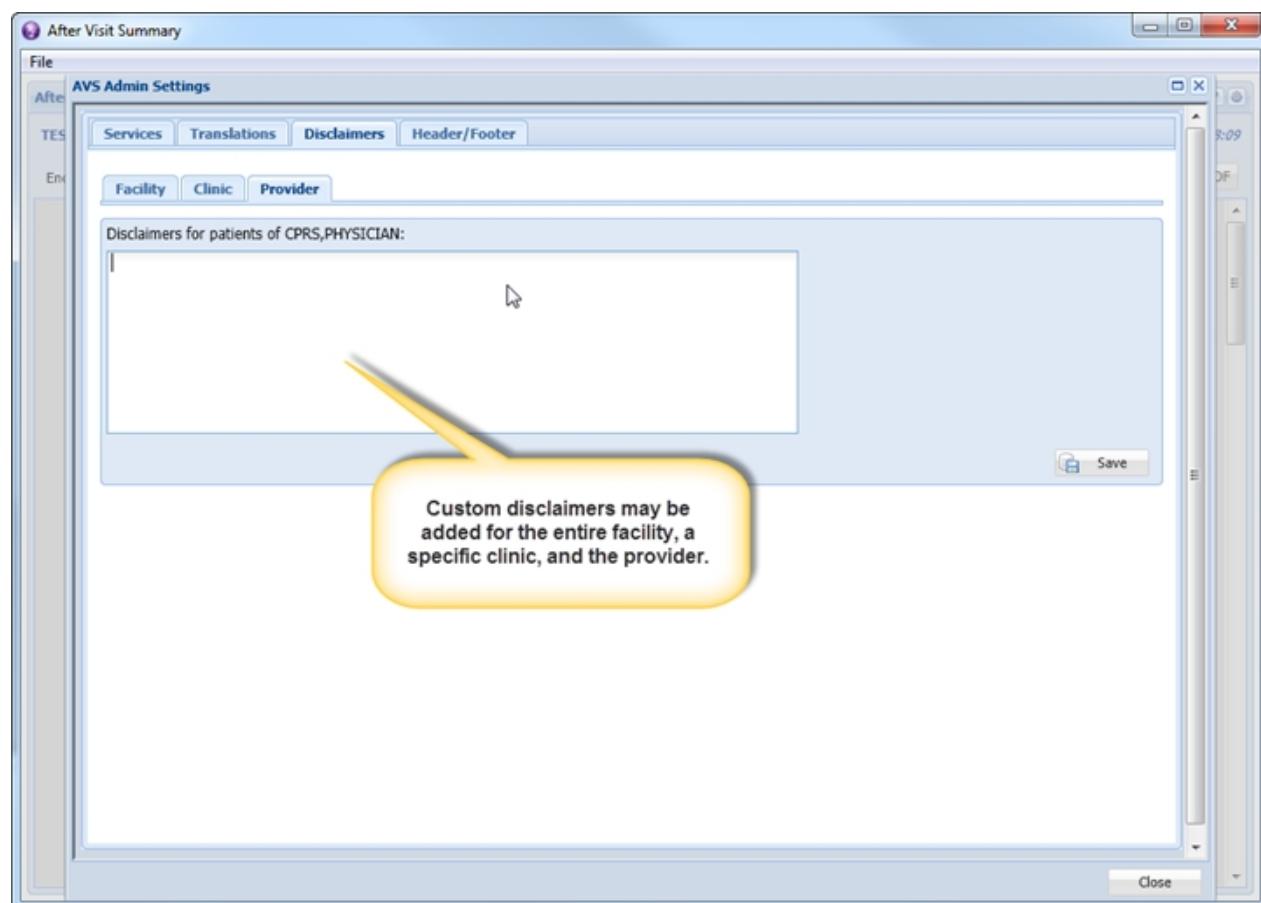
Return to Clinic in 3 months

Patient-friendly text may be entered to replace abbreviations and obscure terms/orders.

ID	Type	Source String	Translation
322	Order Text	>> RTC 3 months	Return to Clinic in 3 months
307	Order Text	>> RTC 4 months with labs	
312	Order Text	>> RTC 6 months	
1148	Order Text	dm/chol in 3 month rtc in 6 months	
2715	Order Text	lipid panel in 1 m nth rtc in 6 months	
3108	Order Text	mammogram liva rtc 12 months w/ outside labs	
101	Order Text	RTC 12 months	
111	Order Text	RTC 12 months or as needed	
2756	Order Text	rtc 12 months w/ outside labs	
3109	Order Text	rtc 12 months w/ outside labs or fasting labs	
104	Order Text	RTC 3 months	
142	Order Text	RTC 4 months	
74	Order Text	RTC 6 months	
3115	Order Text	rtc 6 months w/ fasting labs	
2773	Order Text	rtc 6 months w/ fasting labs "UNSIGNED"	
1702	Order Text	rtc 6 months w/ fasting labs fit test	
3185	Order Text	rtc 6 months with labs prior	
2741	Order Text	rtc 6 weeks	
2409	Order Text	rtc 6-8 weeks	
2407	Order Text	rtc 6-8 weeks "UNSIGNED"	
30	Order Text	RTC AS SCHEDULED	

Close

Custom disclaimers can be added for different users, clinics, and for the facility. And the header and footer boilerplates of the AVS can be configured for the facility.



The screenshot shows the 'AVS Admin Settings' window with the 'Header/Footer' tab selected. It displays 'Header HTML' and 'Footer HTML' sections. To the right, there is a 'Optional String Replacements' table and a preview of the document layout. A yellow callout bubble points to the 'Optional String Replacements' table, which lists the following entries:

String	Description
%PATIENT_NAME%	Patient name
%ENCOUNTER_DATE%	Date of the encounter
%ENCOUNTER_DATETIME%	Date and time of the encounter
%CURRENT_DATE%	Current date
%CURRENT_DATETIME%	Current date and time
%FACILITY_NAME%	Name of the facility

The text in the bubble reads: 'The HTML content of the header and footer may be edited. Optional string replacements may be used in the HTML.'

Testing Checklist

AVS Testing Checklist

1. Instantiation of the AVS from the CPRS Tools menu
 - a) AVS should open up on the same screen as CPRS (if multiple monitors are being used).
 - b) AVS should display the name of the user currently logged into CPRS along with the facility name.
- 2) CCOW patient context switching
 - a) AVS should bring up the same patient currently open in CPRS.
 - b) AVS should automatically switch patients to reflect the selected patient in CPRS.
- 3) Patient identification
 - a) AVS should display the name, SSN, and DoB (age) near the top-left of the screen.
 - b) The patient name should also be displayed in bold in the header of the AVS document itself.
- 4) Patient encounters
 - a) AVS should list the last 60 days of patient encounter locations in a drop-down (combo) box.
 - b) AVS should auto-select the encounter that is the closest match to the current date/time.
 - c) Selecting a new encounter and clicking the Refresh button should cause the AVS to display information relevant to the selected encounter.
- 5) AVS refresh
 - a) Clicking the Refresh button causes the AVS to refresh for the same patient and encounter.
 - b) AVS should automatically refresh the same patient and encounter information every 3 minutes.
 - c) AVS should display the last refresh date and time near the top-right of the screen.
- 6) AVS header
 - a) A header is displayed in the top-left of the AVS document which by default should list the patient name, the visit date, the date generated, and the name of the facility.
 - b) The header template can be modified in the AVS Admin Settings interface (see #19 below).
 - c) The visit date should reflect the date of the selected encounter.
 - d) The VA logo should appear in the upper-right of the AVS document.
- 7) "Today's Visit" section
 - a) The "Clinic's Visited" subsection should reflect the clinic locations and times of each encounter scheduled for the current day.
 - b) The "Providers" subsection should reflect the providers for each encounter scheduled for the current day.
 - c) The "You Were Diagnosed With" subsection should reflect a list of the patient's diagnoses from the selected patient encounter.

- d) The "Vitals as of This Visit" subsection should reflect the values of any vital signs collected the current day (if available).
- e) The "Immunizations" subsection should reflect the immunizations that were administered to the patient for the selected encounter.
- f) The "New Orders From This Visit" subsection should reflect the orders that were created in the context of the selected patient encounter (see # 8 below).

8) New patient orders

- a) AVS should display orders placed in the time window of 30 minutes prior to through 3 hours after the currently selected patient encounter.
- b) Orders that should be displayed include medications, lab, imaging, consult, and text.
- c) AVS should not display discontinued, expired, discontinued/edit, canceled, and lapsed text and lab orders.
- d) New orders that are created while AVS is in session should display when AVS auto-refreshes.
- e) AVS should use the translation engine to replace text in the orders with more patient-friendly text according to entries in the Translations grid of the AVS Admin Settings (see #19 below).

9) "Important Notes" section

- a) The "Upcoming Appointments" subsection should list appointments for the patient from the following day over the next three months (this is configurable for the facility; see #19 below).
- b) The "Instructions" subsection should reflect custom comments entered by the provider into the Instructions dialog (see # 10 below) and/or Krames HealthSheets (see #14 below).

10) Patient instructions

- a) Clicking on the Edit Instructions button should open up the Patient Instructions dialog box where comments may be free-text entered.
- b) The Patient Instructions dialog box should allow the user to customize the font and formatting of the comments.
- c) The Patient Instructions dialog box should allow the user to customize any Krames content that was inserted into the AVS.
- d) AVS should display the content entered or inserted into the Patient Instructions dialog box exactly as it appears in the dialog itself.

11) "My Ongoing Care" section

- a) The "Primary Care Provider" subsection should display the patient's primary provider or "Unknown" if no provider is registered for the patient.
- b) The "Allergies (Reactions)" subsection should list the patient's allergies with a comma-delimited list of reactions in parentheses by each allergy.
- c) The "My Current Medications" subsection should list the patient's active medication list along with the sig, # refills, last fill date, and expiration date (if available).
- d) This section should also display the Lab Results and Clinical Charts if those subsections are enabled and data is available (by default these subsections are turned off (see # 13d below)).

12) Footer

- a) AVS should display at the bottom of the document any facility-wide, clinic, and

provider disclaimers as well as footer text as configured in the AVS Admin Settings interface (see #19 below).

13) Edit AVS

- a) AVS should allow the user to edit the content of the AVS.
- b) AVS should open the AVS Editor in a pop-up window in response to the user clicking the Edit AVS button on the top toolbar.
- c) The user should be able to add, modify, delete, and style content in the AVS Editor.
- d) Upon clicking the Update button the content that is displayed in the AVS document should reflect any changes made in the AVS Editor.

14) Options

- a) Clicking on the top toolbar button labeled "Options" should display a drop-down list of menu options that allow the user to customize certain parts of the AVS.
- b) AVS should allow for setting the font size (Normal, Large, and Very Large) of the AVS document.
- c) AVS should allow for displaying lab results (the default is not to display) from the last one week, one month, or three months. If displayed, lab results should appear in the "My Ongoing Care" section.
- d) AVS should allow for displaying various clinical charts in the form of line graphs (the default is not to display). The clinical data that may be displayed in chart form (if available for the patient) include BMI, BP, Cholesterol, Creatinine, eGFR, HbA1C, HDL, HGB, LDL, Platelets, Pulse, Triglycerides, and Weight. These values that are displayed in the graphs are from the past one year.
- e) AVS should allow for turning subsections on or off in the AVS document. The sections that may be displayed or hidden include Clinics Visited, Providers, Diagnoses, Vitals, Immunizations, Orders, Appointments, Instructions, Primary Care Provider, Allergies, Medications, Clinical Charts, and Lab Results. By default, Clinical Charts and Lab Results are turned off.
- f) AVS should allow the user to include all clinical services information in printouts of AVS documents. If this option is selected then when an AVS is printed, the clinical services information should be printed as well. The clinical services list may be edited using the AVS Admin Settings interface (see #19 below).
- g) AVS should allow the user to select specific clinical services from a list in which to include with the AVS when printed. This option is available when the user clicks the "Options"..."Clinical Service Descriptions"..."Select Clinical Service for inclusion in printouts" menu item.
- h) AVS should allow the user to prevent other users from editing the current document. If this option is selected then other users can access the sheet but may not modify or add custom comments or change any of the options set by the primary provider.

15) Krames

- a) AVS should allow users to search Krames StayWell HealthSheets and select documents for printing or inclusion in the AVS document itself.
- b) AVS should open the Krames interface in response to the user clicking the Krames button on the top toolbar.
- c) AVS should automatically search the Krames database for articles based on the patient's ICD-9 diagnosis codes. The titles of any articles that are returned by Krames are displayed in a list on the left side of the screen.
- d) The user should be able to do a custom search by clicking on the New Search button

on the Krames interface. The Krames Search interface allows the user to search by keywords (with a boolean AND or OR), MeSH codes, ICD-9 codes, CPT codes, and select the language of the articles returned by Krames.

- e) The user should be able to click on an article title (not the checkbox) and have the content of the article displayed.
- f) The user should be able to click the Print Content...Print Entire Document menu option to print the entirety of a selected article.
- g) The user should be able to click the Patient Instructions...Insert Entire Document to insert the entirety of a selected article into the Patient Instructions section of the AVS.
- h) The user should be able to use the mouse cursor to select all or part of the content of the article and click the Print Content...Print Entire Document menu option to print the selected content of the currently displayed article.
- i) The user should be able to use the mouse cursor to select all or part of the content of the article and click the Patient Instructions...Insert Selected Content menu option to insert the selected content of the currently displayed article into the Patient Instructions section of the AVS.
- j) The user should be able to select one or more article titles by checking the checkboxes associated with the articles and then click the Print Selections button to print all selected articles.
- k) The user should be able to minimize the Krames interface by clicking the double-up arrow button on the Krames title bar, and restore the Krames interface by clicking on the double-down arrow button.

16) Note creation/VistA Imaging upload

- a) AVS should allow the user to create a TIU stub note with auto-generated text indicating that the patient has been provided with a copy of the AVS by clicking on the Note button on the toolbar and selecting the Create Note menu option.
- b) This feature should auto-create the note in TIU with the boilerplate text and then administratively close the note (so it doesn't need to be electronically signed).
- c) This feature should also upload a PDF copy of the AVS to VistA Imaging.
- d) The user should be able to simultaneously print a copy of the AVS to the default printer and create a note/upload to VistA Imaging by clicking on the Note button followed by the Print Document & Create Note menu option.
- e) Clicking on either of the aforementioned menu options should display a prompt that explains what this option will do and allowing the user to proceed by clicking Yes or cancel by clicking No.

17) Printing

- a) AVS should allow the user to print to a Windows printer (i.e. a printer in which device drivers are installed on the PC) by clicking the Windows Printer menu option under the Print button on the toolbar. This option should bring up the Adobe PDF Print dialog that allows the user to select the printer and choose other print properties.
- b) AVS should allow the user to print to a network printer and select the printer from a list pulled from VistA. This option is accessible from the Print...VistA Printer menu.
- c) Clicking on the VistA Printer option should bring up a dialog with a list of printers, with the ability to search for a printer by entering in the first few letters of the printer name into the "Printer Name" edit box and clicking the Search button. This action should filter the list that is displayed in the list to only those printers that partially match the search text.

- d) Clicking the Reset button on the dialog referenced in (b) and (c) above should clear the filtered list of printers and display the default list.
- e) Selecting a printer in the list of printers obtained from VistA and then clicking the Print button should result in the AVS document being printed to this printer.
- f) Selecting a VistA printer and checking the "Set this device as the default printer" and then either clicking Apply or Print should set the selected printer to the default.
- g) Clicking the Default Printer menu option under the Print button on the toolbar should either print to the default Windows printer or to the default VistA (network) printer, if a default VistA printer was selected.

18) PDF

- a) AVS should allow the user to display a PDF version of the AVS document in a pop-up window by clicking the PDF button.
- b) From the PDF displayed in the pop-up window the user should be able to print to the default printer (either a Windows printer or VistA/network printer) by clicking the Quick Print button, or to a Windows printer through the PDF print dialog by clicking the Print button.

19) AVS Admin Settings

- a) In response to clicking the admin button (small button with gear icon in upper-right of screen) AVS should open up the AVS Admin Settings dialog in a pop-up window. This dialog has four tabs: Services, Translations, Disclaimers, Header/Footer.
- b) A list of clinical services may be composed from the Services tab. A new service may be added by clicking the Add Service button, followed by entering the service name, location, operating hours, phone, and comment into the grid row and clicking the Update button. The information for a service may be edited by first double-clicking on the row corresponding to the service to be edited, making any changes, and then clicking the Update button. A service may be removed by first clicking on the service row and then clicking the Remove Service button. The data in the services grid may be sorted by clicking on the column headers.
- c) AVS collects location names and order texts and displays them in a grid in the Translations tab. The user should be able to type in alternate text for the source string by clicking on the cell in the Translation column and then entering in substitute text. The user should be able to search for a source string by entering in a partial text string into the search edit box and click the Search button. A filtered list of source strings should appear in the grid. The data in the translations grid may be sorted by clicking on the column headers.
- d) The Disclaimers tab on the AVS Admin Settings screen should allow the user to enter in a facility-wide disclaimer that gets displayed at the bottom of each AVS, as well as a disclaimer for a specific clinic and for the current user. To enter a disclaimer for a clinic, the user should type in the name of the clinic and select it from the list and then enter in the disclaimer into the text box.
- e) The Header/Footer tab should allow the user to edit HTML that gets displayed in the header section of the AVS (top left of the AVS document). The user should be able to use any HTML element along with any of the string replacements displayed in the Optional String Replacements grid to the right. The user should also be able to enter in custom HTML for the footer. Any changes made are reflected in the Preview window at the bottom of the screen.

20) Help

- a) The user should be able to access online help by clicking the help button located in the upper-right of the AVS screen (question mark icon). This should result in a separate browser window opening up with the help contents displayed.

Installation

AVS Installation and Configuration

1. Create a VistaLink Connector Proxy User Account

AVS accesses VistA through the VistaLink application programming interface (API). This is a nationally developed library that allows software applications to interface with VistA through remote procedure calls (RPCs). In order to utilize the VistaLink API, you must set up a connector proxy user in your VistA system. This can be done by using the Foundations Management menu option in VistA (see the example below). Give your account a name between 3 and 35 characters (suggested name: “CONNECTOR, {VAMC}”, where {VAMC} is the abbreviation for your facility, e.g. LOM). You will need to provide the AVS server administrator with the access and verify codes of the connector proxy user account along with the VistaLink server IP and port number (see Welcome page under Introduction section for contact information).

Please see the VistaLink Systems Management Guide, section 8.6 titled “Creating Connector Proxy Users for J2EE Systems” for more information on how to create a connector proxy user in your VistA system.

http://www.va.gov/vdl/documents/Infrastructure/VistALink/vistalink_1_6_sm.pdf

2. Create a TIU note title (for note auto-generation) and provide IEN.

The Title TIU note is used by AVS for automated stub note creation and VistA Imaging uploads. The note title IEN must be provided to the AVS administrator (see Welcome page under Introduction section for contact information).

3. Install KIDS file for creation of application proxy.

The KIDS file creates an application proxy which allows the AVS to call certain Remote Procedure Calls (RPCs) without the need for a VistA service account.

Note: This step is not yet required. In lieu of the application proxy, please create a VistA service account with access to the OR CPRS GUI CHART and DVBA CAPRI GUI menu options and provide the DUX to the AVS server administrator.

4. Install Windows client on network share accessible to all CPRS users.

The Windows client provides CCOW support for the AVS for automatic patient-context switching in sync with CPRS. The client can be downloaded from the following page: <http://r01dvrcom14.r01.med.va.gov/avs/software>

5. Set up a shortcut on the CPRS Tools menu pointing to the Windows client in Step 4.

The CPRS Tools menu shortcut should be configured as follows:

```
After Visit Summary={NETWORK_SHARE}\WebClient.exe title="After Visit Summary" stationNo="{STN}" userDuz="%DUZ" patientDfn="%DFN" url=http://r01dvrcom14.r01.med.va.gov/checkout/wizard/index.html
```

- {NETWORK_SHARE} is the path of the network folder where the Windows client is installed (step #4 above).
 - {STN} is the station number.
6. **Create a user class called "AVS ADMINISTRATOR" and assign to users responsible for configuring AVS for the facility.**

User access to the AVS Admin interface, which allows for facility-wide configuration settings, is controlled by this user class. Only users with this user class will have access to the AVS Admin interface.

7. **Provide a list of CBOCs that will use the software.**

Please provide the station/division # and name of each CBOC to the AVS server administrator.

8. **Provide a list of health factors used for tracking patient-preferred language and smoking status.**

The AVS displays the patient's preferred language and smoking status. Provide a list of the Health Factors that are set up in your VistA system that are used to store these items. Please see below for further details on this. You'll need to provide the following to the AVS server administrator:

- Internal Entry Number (IEN) and name of each of the Health Factors associated with smoking status.
- IEN and name of each Health Factor associated with patient-preferred language.