

Agency for Healthcare Research and Quality (AHRQ)

Electronic Preventive Services Selector (ePSS) for

iPhone/iPod

## **Instructions for Use**



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## Overview

This document provides instructions for viewing the US Preventive Service Task Force (USPSTF) recommendations using an iPhone or iPod touch device. The user can Search the database for specific recommendations using criteria filters including: age, sex, pregnancy status, tobacco use and sexual activity, Browse for all specific recommendations grouped by clinical topics or retrieve saved recommendations using Bookmarks. New features of the ePSS enable users to Customize and Save Searches, Bookmark favorite recommendations and topics, and Email and Print results with, or without, patient or clinician personalization.

## Search for Recommendations

Selecting the Start button "**Start >**" on the upper right corner of the screen initiates a targeted search for specific recommendations. Optional search criteria, as shown in Figure 1, can be entered to filter results based on:

- Age between 0-99 (for infants under the ages of 1 year, enter 0)
- Patient gender by selecting the button "Male" or "Female". If the "Both" button is selected, recommendations for both Male and Female patients are displayed
- Pregnancy status, choose "Yes" to indicate pregnant
- Tobacco User, choose "Yes" for "Tobacco User"
- Sexually Active, choose "Yes" for "Sexually Active"

The Reset button "**Reset**" is used to clear the search criteria and start a new search.


The Search screen can be accessed from anywhere within the application by selecting the Search icon "".



Figure 1: Search for Recommendations Screen

## Search Results Display and Navigation

As shown in Figure 2, the current Search Criteria is displayed above the search results, followed by a list of all recommendations matching the search criteria grouped into five grade tabs: A, B, C, D, and I. Selecting the Grade tab changes the display to include only recommendations for the corresponding grade level. In general, recommendations with grades A or B are grouped under the Category Recommended, grade D is grouped under the Category Not Recommended, and grades C or I are grouped under the Category Uncertain. An asterisk, "\*", in front of the recommendation, indicates that the grade definition has changed. Selecting the Search button "Search" at the bottom of the screen displays a new search screen. The Browse "Browse" and Bookmarks "Bookmarks" icons enable the user to switch between search modes.

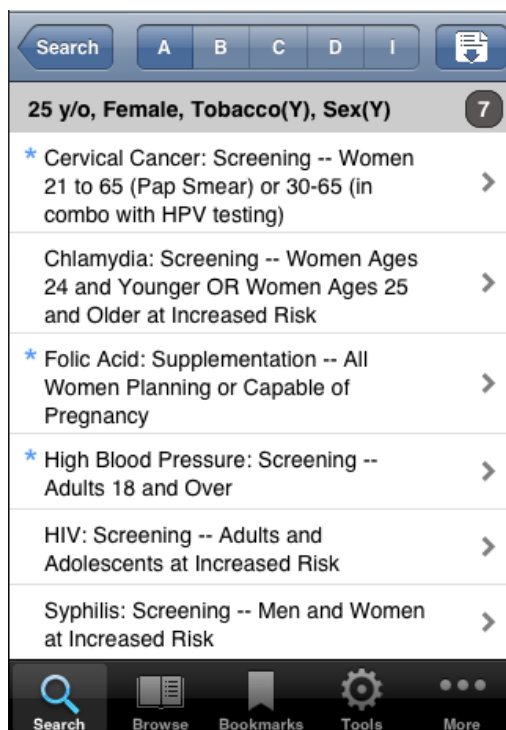


Figure 2: Search Results Screen

Selecting a Recommendation in a Search Results list displays the Recommendation/Risk Factor Selection Screen (Figure 3) enabling the user to choose between the Recommendation Detail screen and the Risk Factor Information screen (if available). Selecting the Recommendations button "Recommendation" opens the Recommendation Detail screen (Figure 4), providing General Information about the Recommendation with the following tabs:

- General (Default Display): Displays the Detail, Grade, Frequency of Service (if available) and Risk Information (if available) for the selected Recommendation
- Clinical: This tab displays the Topic-level Clinical Consideration information for the selected Recommendation
- Rationale: This tab displays the Rationale information for the Specific Recommendation, or the Rationale information for the associated Clinical Topic, if available
- Tools: This tab provides the Specific Recommendations, grades and qualified Screening Tools

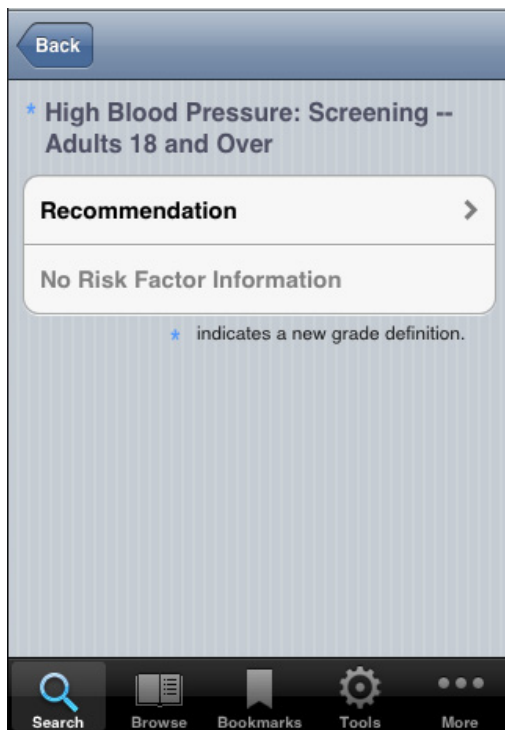


Figure 3: Recommendation/Risk Factor Selections Screen

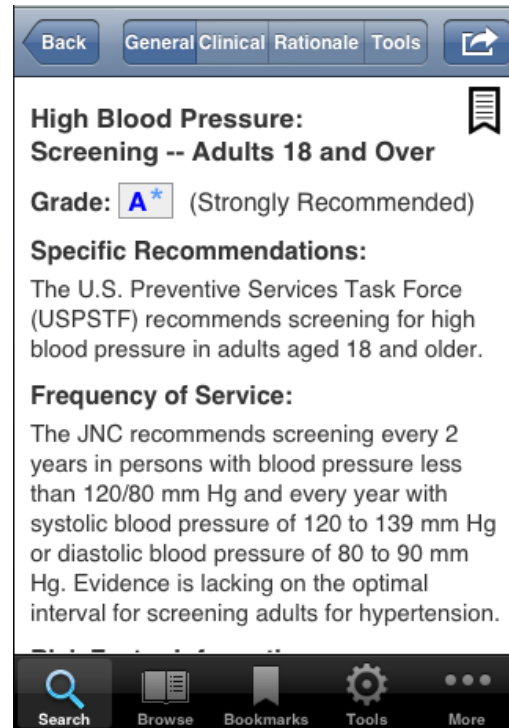






Figure 4: Recommendation Details Screen

## Save Search

The ePSS application provides the capability to save a search for later retrieval. Select the Save Search button  on the Search Results screen (Figure 2) to open the Save Search screen (Figure 5), and enter a title for the saved search and any additional notes. Select the Save button , to save the search criteria and results list. Saved searches are accessed using the More icon  from the lower right of the screen, as described below. Select the "Saved Searches" option from the More  menu to view the saved searches list (Figure 6).

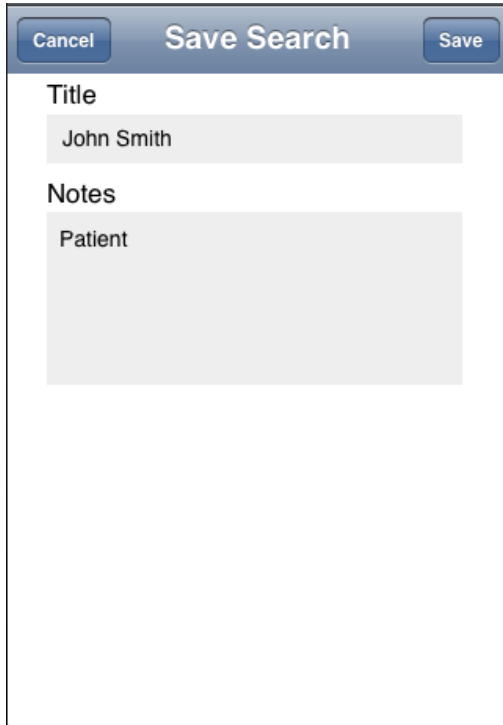


Figure 6: Save Search Screen

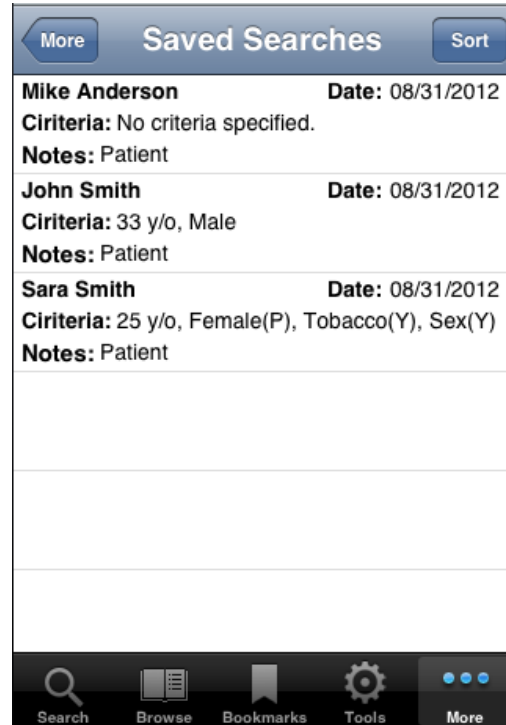


Figure 5: Saved Searches List

### Customizing Search Results

Search Results can be edited to produce a customized recommendations list by categorizing recommendations as either relevant or non-relevant. Recommendations designated as non-relevant are removed from the results list. Removal only reclassifies the recommendation in the Results List as non-relevant. Recommendations are removed by swiping a recommendation (Figure 7) and selecting Remove button "Remove". A recommendation can be moved back to relevant list by swiping the title and selecting Add button "Add". Customized Result Lists (Figure 8) can be saved for later retrieval as previously described in SAVE SEARCH.

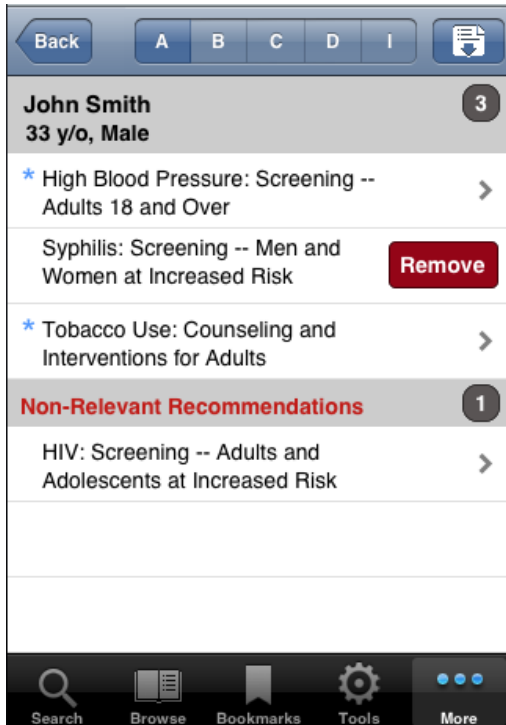


Figure 7: Remove Non-Relevant Recommendations

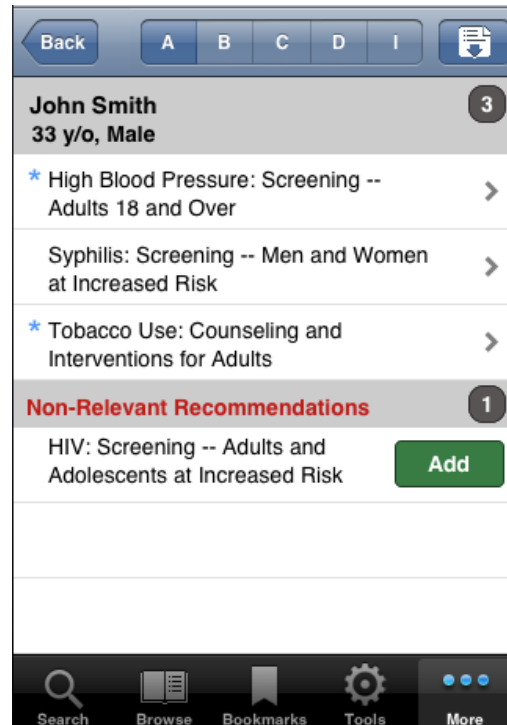



Figure 8: Customized Results List



## Browse Recommendations by Topic

Browse by Topic displays recommendations by Clinical Topics, as shown in Figure 9. Browse by Topic can be initiated by selecting the Browse icon . The Topic Display is controlled using four tabs:

- View All: This tab displays a list of all USPSTF topics sorted in alphabetical order.
- Counseling: This tab displays the list of USPSTF topics by Counseling category.
- Preventive Rx: This tab displays the list of USPSTF topics by Preventive Medication category.
- Screening: This tab displays the list of USPSTF topics by Screening category.

Select a topic from the list to view the Topic Recommendation Details.

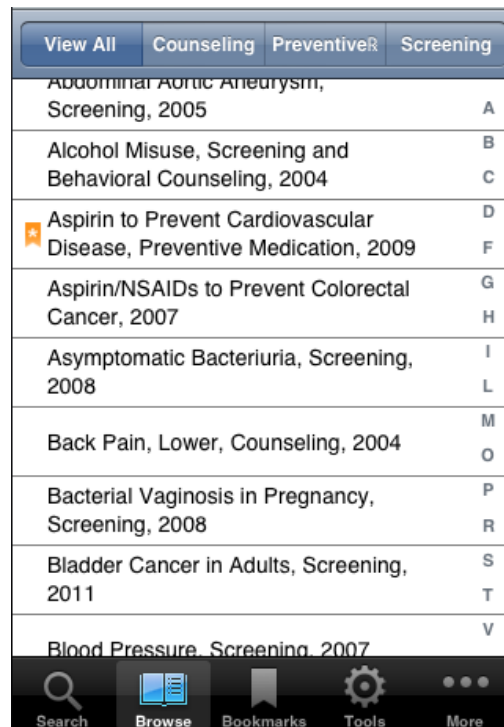


Figure 9: Browse by Topic Screen

Selecting a topic name displays the Topic Grade Screen (Figure 10). Selecting a grade displays the Specific Recommendations related to that Clinical Topic for the selected grade, as shown in Figure 11, and provides the following tabs:

- General (Default): Displays the Detail, Grade, Frequency of Service (if available), and Risk Information (if available), for each Specific Recommendation associated with the Topic
- Clinical: Displays the Clinical Consideration information for the selected Topic
- Rationale: Displays the Rationale information for Specific Recommendations, or the Rationale information for the selected topic, as available
- Tools: Displays the list of Specific Recommendations, their Grade and qualified Screening Tools

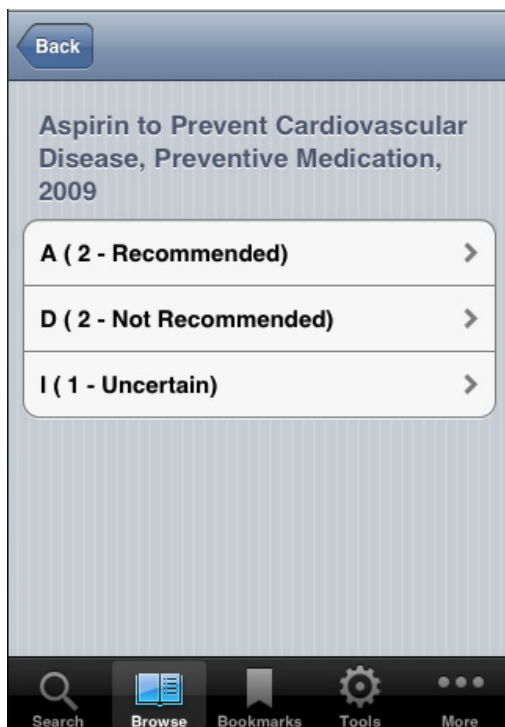


Figure 10: Topic Grade Screen

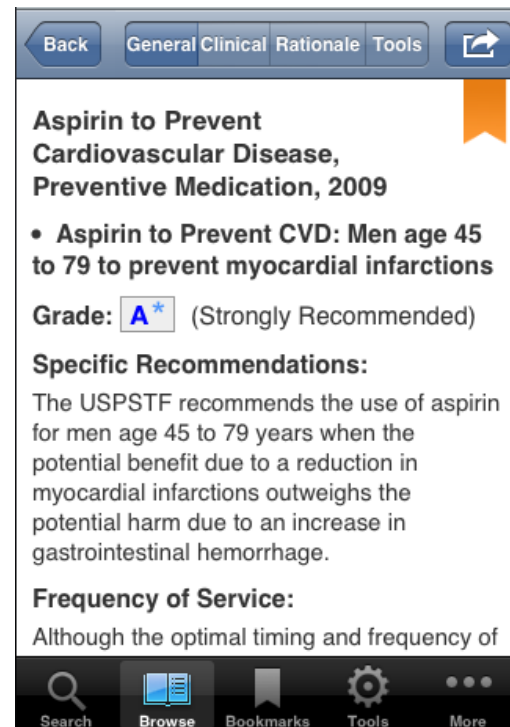


Figure 11: Topic Details Screen

## Email/Bookmark Results

Select the Email & Print button "✉" to initiate the Print and Email functions (Figure 12) from the results screen. Select the "Email" button to open the Compose a Message screen. Enter the recipients email addresses, subject and send the email. Recommendations are included as an HTML attachment to the email message. The ability to email requires an appropriately configured and iPhone/iPod accessible email account.

Similarly, select the Bookmark button "🔖" save Recommendations and Topics for later recall using the Bookmark icon "🔖". The bookmark button changes to "🔖", indicating the item is now bookmarked.

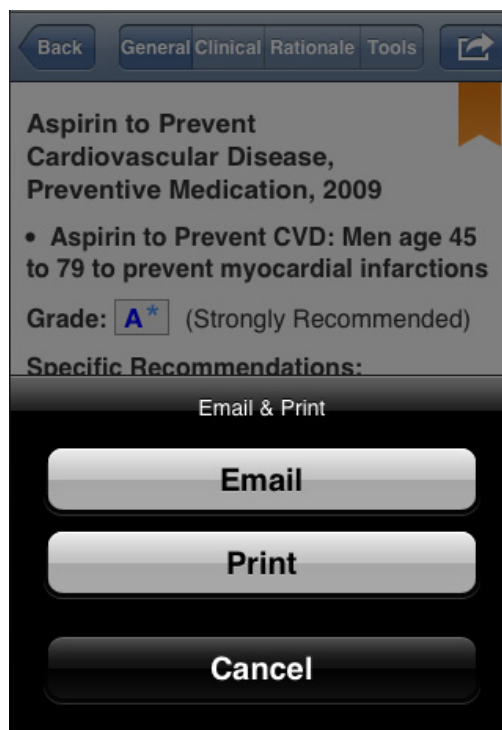




Figure 12: Print and Email Functions Screen

## Bookmark Search

Selecting the Bookmarks icon " " opens a list of bookmarked titles and topics, as shown in Figure 13. The bookmarked list contains two sections. The first section lists all the bookmarked short titles from searched list. The second section lists all the bookmarked topics from Browse by Topics list. Simply tap the short title or topic to view the ePSS recommendation.

The users can swipe the bookmarked item from the bookmarked table (Figure 14) or click the Bookmarked button " " at the Recommendation Detail screen (Figure 4) to remove the bookmarked recommendation or bookmarked topic.

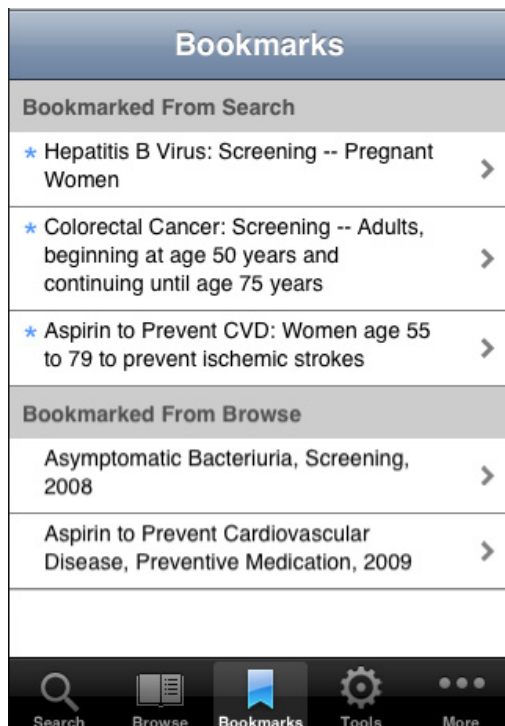


Figure 13: Bookmarked Titles and Topics

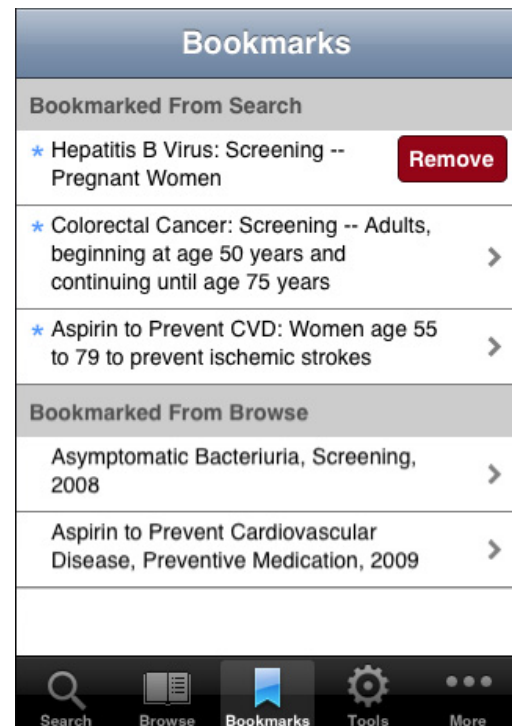




Figure 14: Remove Bookmarks Screen

## View /Email Saved Searches

To view saved searches, select the More button  and then the Saved Searches option. This will open the Saved Searches screen (Figure 15). Each item contains title, search criteria, and notes. Touch the Sort button  to sort the save searches list by date or name. Touch a saved search to view the saved search details (Figure 16).

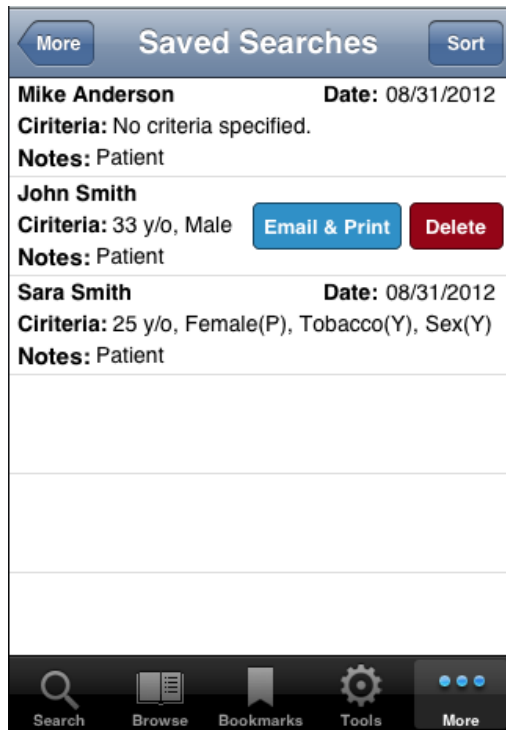


Figure 15: Saved Searches Screen

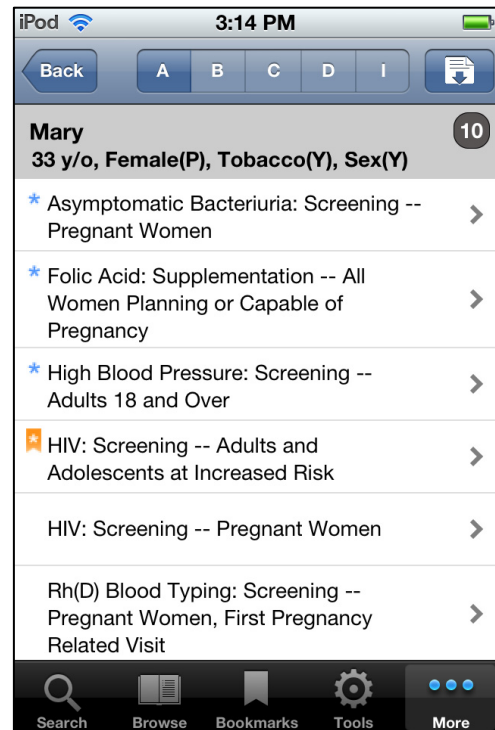






Figure 16: Saved Search Details

You can delete or email a saved search from the list. Swipe a saved search to display Email & Print button  and Delete button  (Figure 15). Touch the Delete button  to remove the selected saved search permanently. Touch the Email & Print button  to email or print the saved search (Figure 17).

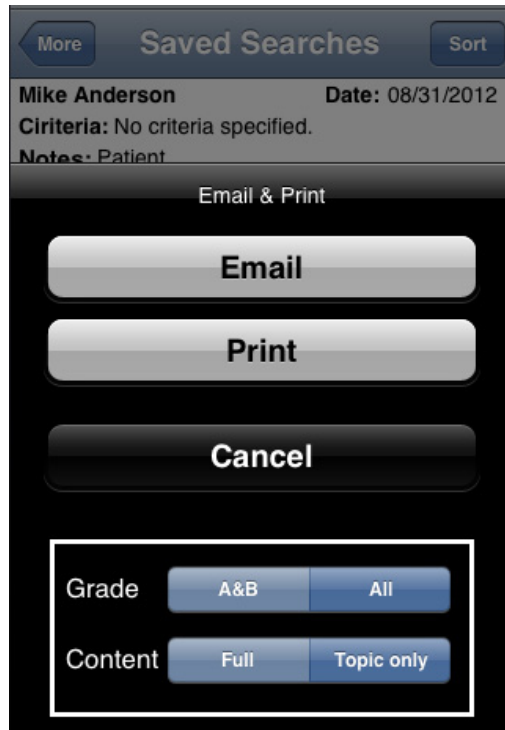


Figure 17: Email & Print Saved Search

## Personalization

The Settings feature provided by ePSS can be used to enter information that is included in emails and in the header of printed results. Select "Settings" on the Information Screen (Figure 18), to open the Settings Screen (Figure 19).

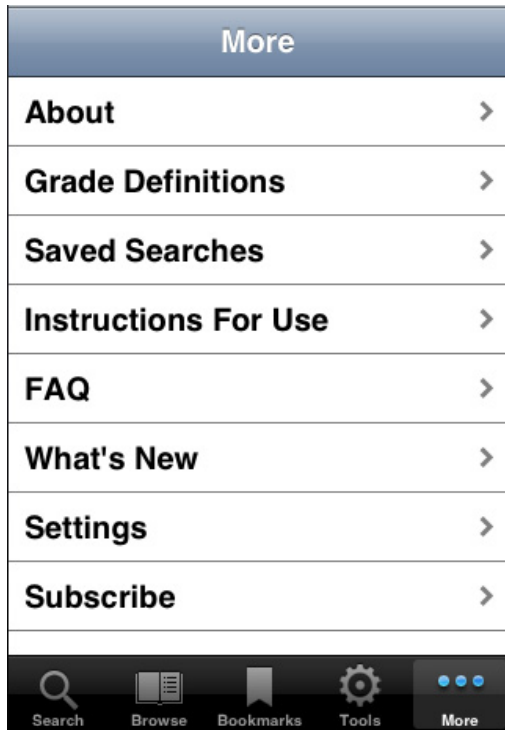


Figure 18: Information Screen



Figure 19: Settings Screen

Figure 20 provides an example of personalized email attachments using the data entered into the Settings Screen (Figure 19).

ePSS Recommendations Rx Dr. John A. Smith, Shady Grove Hospital

Mary K. Smith: 24 Y/O, Female(P), Tobacco(N), Sex(Y)

\* Indicates a new grade definition

26 - Recommended (A, B)	
Grade	Title
A*	Asymptomatic Bacteriuria: Screening -- Pregnant Women
A*	C
A	C
A*	ar
A*	Fr
A	H
A	H
A*	H
A*	H
A	R
A	Vi

5XXXX Shady Grove

ePSS Recommendations Rx Dr. John A. Smith, Shady Grove Hospital

Mary K. Smith: 24 Y/O, Female(P), Tobacco(N), Sex(Y)

**Asymptomatic Bacteriuria: Screening -- Pregnant Women**

Grade A (Strongly Recommended)\*:

Specific Recommendations:

The USPSTF recommends screening for asymptomatic bacteriuria with urine culture for pregnant women at 12 to 16 weeks' gestation or at the first prenatal visit, if later.

Frequency of Service:

All pregnant women should provide a clean-catch urine specimen for a screening culture at 12 to 16 weeks' gestation or at the first prenatal visit, if later. The optimal frequency of subsequent urine testing during pregnancy is uncertain.

Risk Factor Information:

No information available.

5XXXX Shady Grove Rd Rockville MD 20850 8/28/2012

Figure 20: Personalized Email Attachments



Figure 21 provides an example of personalized printouts using the data entered into the Settings Screen (Figure 19).

ePSS Recommendations Rx Dr. John Smith, Shady Grove Adventist Hospital

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Mary K. Smith: 24 Y/O, Female (P), Tobacco (N), Sex (Y)

### Asymptomatic Bacteriuria: Screening -- Pregnant Women

**Grade A (Strongly Recommended)\***

**Specific Recommendations:**  
The USPSTF recommends screening for asymptomatic bacteriuria with urine culture for pregnant women at 12 to 16 weeks' gestation or at the first prenatal visit, if later.

**Frequency of Service:**  
All pregnant women should provide a clean-catch urine specimen for a screening culture at 12 to 16 weeks' gestation or at the first prenatal visit, if later. The optimal frequency of subsequent urine testing during pregnancy is uncertain.

**Risk Factor Information:**  
No information available.

**Clinical Considerations:**

**Patient Population**  
This recommendation applies to the general adult population, including adults with diabetes. The USPSTF did not review evidence for screening certain groups at high risk for severe urinary tract infections, such as transplant recipients, patients with sickle cell disease, and patients with recurrent urinary tract infections.

**Screening Tests**  
The screening tests used commonly in the primary care setting (dipstick analysis and direct microscopy) have poor positive and negative predictive value for detecting bacteriuria in asymptomatic persons. Urine culture is the gold standard for detecting asymptomatic bacteriuria but is expensive for routine screening in populations with a low prevalence of the condition. However, no currently available tests have a high enough sensitivity and negative predictive value in pregnant women to replace the urine culture as the preferred screening test.

**Treatment**  
Pregnant women with asymptomatic bacteriuria should receive antibiotic therapy directed at the cultured organism and follow-up monitoring.

**Screening Intervals**  
All pregnant women should provide a clean-catch urine specimen for a screening culture at 12 to 16 weeks' gestation or at the first prenatal visit, if later. The optimal frequency of subsequent urine testing during pregnancy is uncertain.

**Rationale:**

**Importance:** In pregnant women, asymptomatic bacteriuria has been associated with an increased incidence of pyelonephritis and low birthweight (birthweight <2500 g).

**Detection:** Asymptomatic bacteriuria can be reliably detected through urine culture. The presence of at least 10<sup>5</sup> colony-forming units per mL of urine, of a single uropathogen, and in a midstream clean-catch specimen is considered a positive test result.

**Benefits of Detection and Early Intervention:** In pregnant women, convincing evidence indicates that detection of and treatment for asymptomatic bacteriuria with antibiotics significantly reduces the incidence of symptomatic


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Figure 21: Personalized Printout

## Tools

Based on recommendations from the USPSTF, these tools are designed to help clinician's access information at the point of care. The ePSS application provides clinicians with a convenient mechanism for accessing available tools directly, without searching and viewing recommendations.

Select the Tools icon  to view the USPSTF recommended screening tools, as shown in Figure 22. A wireless or WiFi internet connection is required to access these tools.

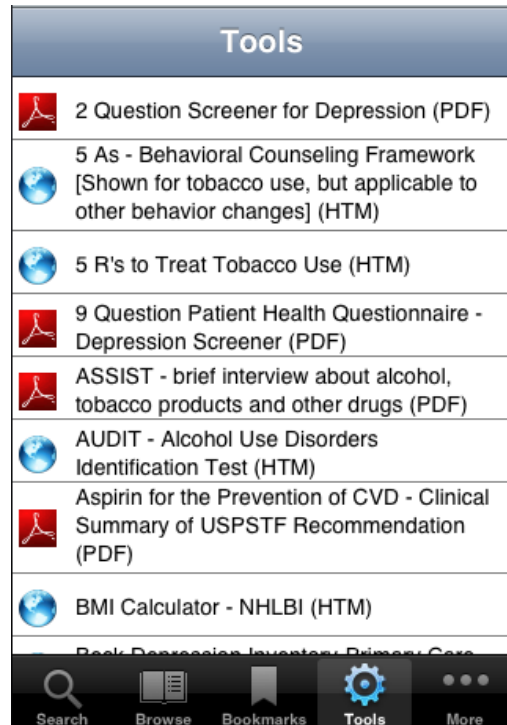



Figure 22: Tools Screen

## Information Screens

Select the More icon  to display general information (Figure 18) about the ePSS application, and to access specific features and customization options including:

- About
- Grade Definitions
- Saved Searches
- Instructions for Use
- FAQ
- What's New
- Settings
- Subscribe