



EPIC REFERENCE GUIDE

EFFECTIVELY IMPLEMENTING CDC'S ADULT HEPATITIS B VACCINE POLICY



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DYNAVAX



IMPORTANT NOTES ABOUT YOUR EPIC REFERENCE GUIDE

- ✔ The information within this document is specific to Epic electronic health record (EHR) software and intended for educational purposes only. Health systems are responsible for developing, implementing, testing, and monitoring all Epic features utilized within their EHR system to ensure proper application and functionality.
- ✔ This document has not been reviewed or endorsed by the developers of Epic. The information presented may not be complete or up-to-date as systems change without notice.
- ✔ The decision to vaccinate a patient is the responsibility of the provider, in consultation with the patient.
- ✔ This document is intended to be applicable to a wide range of health system sizes, but with an emphasis on the outpatient versus inpatient setting.
- ✔ Your institution/health system may or may not have access to all Epic features and tools described within this document.

COMMON EPIC USERS AMONG YOUR HEALTHCARE TEAM



PROVIDER
Physician, NP, PA



NURSE



PHARMACIST



**HEALTH SYSTEM
MANAGEMENT**



PATIENT

INTRODUCTION TO YOUR UNIVERSAL EPIC GUIDE

This reference guide is a resource to help facilitate hepatitis B vaccination within health systems, in consideration of the Centers for Disease Control and Prevention (CDC) routine hepatitis B vaccination recommendations in all adults.^{1,2*} With hepatitis B vaccination now deemed routine in this population, millions of adults in the United States are recommended for vaccination.³ This reference guide highlights **decision support tools, chart functionalities, and population health strategies** specific to Epic software that can be leveraged to implement hepatitis B vaccination strategies targeting appropriate adult patients.

TABLE OF CONTENTS

Hepatitis B Landscape in the United States	4
<i>Adult Hepatitis B Vaccination Guidelines</i>	4
What You Will Find Within the Reference Guide	5
Available Epic Features and Tools	6
Guidance for the Implementation of Epic Features and Tools	8–17
Epic Reference Guide – Take the Next Step	18

*The CDC Advisory Committee on Immunization Practices (ACIP) updated its guidelines to recommend that all adults aged 19–59 years should receive hepatitis B vaccination. Additionally, all adults aged 60 years and older with risk factors for hepatitis B infection should be vaccinated. Adults aged 60 years and older without known risk factors may receive hepatitis B vaccination.¹

HEPATITIS B LANDSCAPE IN THE UNITED STATES

Hepatitis B remains a major public health concern, with 12 million Americans infected with the virus and up to 2.4 million living with chronic infection.^{4,5} While the 1991 pediatric policy helped decrease rates of hepatitis B in children, many adults are still vulnerable and cases are on the rise.⁶ To combat the growing number of hepatitis B cases, the CDC now recommends universal hepatitis B vaccination in eligible adults.^{1,2}

WHY DID THE CDC'S POLICY CHANGE TO UNIVERSAL VACCINATION?



In 2019, ~50% of new cases were among adults 30–49 years¹



In many states, the rate of new cases in adults has increased in the last decade^{1,7}



Due to the lack of an effective adult vaccination strategy, 4 out of 5 adults **born before 1991** do not have vaccine-induced immunity⁷

ADULT HEPATITIS B VACCINATION GUIDELINES IN THE US

The CDC's Advisory Committee on Immunization Practices (ACIP) issued updated hepatitis B vaccination recommendations for adults.² The *Morbidity and Mortality Weekly Report (MMWR)* published the recommendations as official guidelines in April 2022.¹

New guidelines simplify hepatitis B vaccine recommendations in adults^{1,2}

ALL ADULTS AGED 19–59 YEARS  SHOULD RECEIVE HEPATITIS B VACCINATION

ADULTS AGED 60 YEARS AND OLDER WITH RISK FACTORS*  SHOULD RECEIVE HEPATITIS B VACCINATION

ADULTS AGED 60 YEARS AND OLDER WITHOUT KNOWN RISK FACTORS  MAY RECEIVE HEPATITIS B VACCINATION

CDC, Centers for Disease Control and Prevention.

*Please refer to the hepatitis B vaccination guidelines noted in the *MMWR* publication for the specific risk factors for hepatitis B.¹

WHAT YOU WILL FIND WITHIN THE REFERENCE GUIDE

This guide discusses **decision support tools**, **chart functionalities**, and **population health strategies** specific to Epic that health systems can leverage to increase vaccination rates for hepatitis B among adults.

IDENTIFYING AND ADDRESSING PATIENT INTERVENTIONS

By using features and tools available in Epic, health systems can create a customized approach to implementing the CDC policy, with the goal of proactively encouraging hepatitis B vaccination among adults aged 19 years and older^{1,2} and tracking hepatitis B vaccine series completion.



Decision Support Tools

Functionalities for specific user groups that require response from the user.



Chart Functionalities

Tabs or screens accessible within a patient chart that provide key information to users. The information displayed can trigger a user to make a decision or perform a specific evaluation for that patient.








Population Health Strategies

Interactive databases that generate customized and filtered patient lists across an entire health system based on selected criteria. These patient lists can be leveraged to create batch functions. Examples of batch functions include, but are not limited to, sending a chart message, ordering a vaccine or medication, or flagging vaccination statuses.

AVAILABLE EPIC FEATURES AND TOOLS







Below is a curated list of Epic features and tools available to help healthcare teams identify and address hepatitis B vaccination gaps.

FEATURE/ TOOL	TYPE	DEFINITION	INTENDED END USER	OUTPUT
Section 1: Decision Support Tools				
Best Practice Alert (BPA)	 ALERT	Customizable alerts that pop up within a patient chart, triggering an action/decision from the Epic user	<ul style="list-style-type: none"> • Provider (Physician, NP, PA) • Pharmacist • Nurse 	<ul style="list-style-type: none"> • Suggested intervention accepted and activated (eg, order placed) • Suggested intervention dismissed or postponed
Medication Alert	 ALERT	Appear when entering a medication or vaccination order, suggesting product alternatives (eg, formulary options, alternatives to out-of-stock or low-stock medications)	<ul style="list-style-type: none"> • Ordering providers and eligible co-signers 	<ul style="list-style-type: none"> • Preferred medication or vaccination product selected • Preferred medication or vaccination product declined
After Visit Summary (AVS)	 PRINT DOCUMENT	Printed information provided to patient after a visit or hospitalization summarizing the encounter, and includes instructions, current medication list, follow-up appointments, and vaccination status	<ul style="list-style-type: none"> • Provider (Physician, NP, PA) • Pharmacist • Nurse 	<ul style="list-style-type: none"> • Suggested intervention accepted and activated (eg, vaccination consultation, vaccination ordered) • Suggested intervention dismissed or postponed
Health Maintenance Alert	 PASSIVE NOTIFICATION	Type of preventative care tracking tool, which helps healthcare team members identify care gaps, including missing and overdue vaccinations	<ul style="list-style-type: none"> • Provider (Physician, NP, PA) • Nurse • Pharmacist 	<ul style="list-style-type: none"> • Passive – no direct action from generated alert • Vaccine manually ordered and subsequently administered and documented
SmartSet	 ORDER ENTRY	SmartSets provide streamlined order entry workflow by including all necessary individual orders associated with specified clinical care outcomes into one submission, such as lab tests, x-rays, medications, vaccinations, and consultations	<ul style="list-style-type: none"> • Ordering providers and eligible co-signers 	<ul style="list-style-type: none"> • Vaccine ordered and administered

(Continued on next page.)

AVAILABLE EPIC FEATURES AND TOOLS

Below is a curated list of Epic features and tools available to help healthcare teams identify and address hepatitis B vaccination gaps. (continued)

FEATURE/ TOOL	TYPE	DEFINITION	INTENDED END USER	OUTPUT
Section 2: Chart Functionalities				
Patient Storyboard	 PASSIVE NOTIFICATION	A customizable section on the left side of the patient's chart that provides an overview of the patient's details, which includes demographics, problem list, current diagnosis, social determinants, etc	<ul style="list-style-type: none"> • Provider (Physician, NP, PA) • Pharmacist • Nurse 	<ul style="list-style-type: none"> • Passive – no direct action from generated alert • Vaccine manually ordered and subsequently administered and documented
Patient Immunization Record (LIM)	 EHR TAB IN PATIENT CHART	This feature houses the patient's vaccination record and captures vaccinations from manual entry, immunization registries, medication administration records, and the immunization activity screen	<ul style="list-style-type: none"> • Provider (Physician, NP, PA) • Pharmacist • Nurse 	<ul style="list-style-type: none"> • Passive – no direct action from generated alert • Vaccine manually ordered and subsequently administered and documented
Reports	 .XLS OR .CVS	Functionality that allows users to search among patients within a health system based on predefined criteria	<ul style="list-style-type: none"> • Provider (Physician, NP, PA) • Health system management 	<ul style="list-style-type: none"> • Report generated and reviewed for vaccination eligibility • Vaccine manually ordered and subsequently administered and documented
MyChart Messages	 PATIENT PORTAL	Descriptive and personalized reminder messages for vaccinations and screenings sent by the patient's provider	<ul style="list-style-type: none"> • Provider (Physician, NP, PA) • Patient 	<ul style="list-style-type: none"> • Patient notified of vaccination recommendation • Patient schedules a vaccination appointment or receives it at a pharmacy
Section 3: Population Health Strategies				
Healthy Planet Slicer Dicer Cheers	 DATABASE/ MODULE	Aggregation and filtering of population health and accountability patient data	<ul style="list-style-type: none"> • Provider (Physician, NP, PA) • Health system management 	<ul style="list-style-type: none"> • Reports, dashboards, and/or data sets generated and reviewed for vaccination eligibility
Bulk Message/Bulk Order	 DATABASE OUTPUT FUNCTION	Bulk actions that can be performed based on the selected patient population from the database/modules above	<ul style="list-style-type: none"> • Provider (Physician, NP, PA) • Health system management 	<ul style="list-style-type: none"> • Vaccine automatically ordered for all patients within a predefined data set and subsequently administered and documented

GUIDANCE FOR THE IMPLEMENTATION OF EPIC FEATURES AND TOOLS BEST PRACTICE ALERT (BPA)



DECISION SUPPORT TOOL > Alert

BPAs are customizable alerts that pop up within a patient chart, triggering an action or decision from the user.

CONSIDERATIONS

- It is important to ensure correct inclusion/exclusion criteria are incorporated to avoid unnecessary or incorrect popups
- Set up the hepatitis B vaccination BPA as a “hard stop” to encourage healthcare teams to speak with their patients about vaccination and preventative care
- Link the BPA action to open a specific [SmartSet](#) to allow providers to order the hepatitis B vaccination series and print patient education
- Include a link to the hepatitis B [MMWR publication](#) in your alert to give your healthcare team members key information to make informed decisions

HEPATITIS B VACCINATION – IMPLEMENTATION CHECKLIST

- Select title of alert:** Adult Hepatitis B Vaccination Status

- Include key message:** Your patient is [RECOMMENDED to receive/OVERDUE for/MISSING A DOSE of] routine hepatitis B vaccination

- Select inclusion criteria for vaccination eligibility based on:**
 - **Patient Age:** Patients aged 19 years and older^{1*} **AND**
 - **Hepatitis B Vaccination History:** No history of vaccination

- Select exclusion criteria for vaccination eligibility based on:**
 - **Patient Age:** Patients aged 18 years and younger¹ **OR**
 - **Contraindications to Hepatitis B Vaccination** **OR**
 - **Hepatitis B Vaccination History:** Completion of hepatitis B vaccine series

- Create a Preference List for the hepatitis B vaccine on your health system’s formulary**

- Create a Rule based on the inclusion and exclusion criteria above in order to identify patients recommended to receive hepatitis B vaccination**

- Create a BPA Criteria Record, which will indicate the ACIP criteria logic necessary to trigger the alert**

ACIP, Advisory Committee on Immunization Practices; CDC, Centers for Disease Control and Prevention; MMWR, *Morbidity and Mortality Weekly Report*.

*In order to comply with Boolean logic and address shared decision making, consider flagging adults aged 60 years and older without risk factors as *recommended to receive* hepatitis B vaccination.

GUIDANCE FOR THE IMPLEMENTATION OF EPIC FEATURES AND TOOLS

MEDICATION ALERT



DECISION SUPPORT TOOL > Alert

Medication Alerts may appear when entering a medication or vaccination order; they are used to prompt users of product alternatives (eg, formulary options, alternatives to out-of-stock or low-stock medications)

CONSIDERATIONS

- Create a Medication Alert to notify users of alternative options for hepatitis B vaccines
- Pre-selected alternative product functionality is an important feature of Medication Alerts, as it can track formulary changes and product availability
- Activate Medication Alerts for pharmacists and nurses, as they may have the capability to enter orders for cosign by providers*

HEPATITIS B VACCINATION - IMPLEMENTATION CHECKLIST

- Select title of alert:** Select the Preferred Product for Hepatitis B Vaccination
- Include key message:** Your patient is recommended to receive a hepatitis B vaccination
- Select inclusion criteria for vaccination eligibility based on:**
 - **Patient Age:** Patients aged 19 years and older[†]
- Select exclusion criteria for vaccination eligibility based on:**
 - **Non-Preferred Products:** Hepatitis B vaccines not on your health system's formulary **OR**
 - **Patient Age:** Patients aged 18 years and younger[†] **OR**
 - **Contraindications to Hepatitis B Vaccination**
 - **Hepatitis B Vaccination History:** Completion of hepatitis B vaccine series

CDC, Centers for Disease Control and Prevention.

*Not all health systems allow pharmacists and/or nurses to enter orders for cosign by providers. Check with your health system's policy before granting access to these user groups. †In order to comply with Boolean logic and address shared decision making, consider flagging adults aged 60 years and older without risk factors as *recommended to receive* hepatitis B vaccination.

GUIDANCE FOR THE IMPLEMENTATION OF EPIC FEATURES AND TOOLS AFTER VISIT SUMMARY (AVS)



DECISION SUPPORT TOOL > Print Document

The AVS is provided to patients after a visit or hospitalization. It includes instructions, current medication list, follow-up appointments, and vaccination status

CONSIDERATIONS

- Rules can be leveraged to prompt users to speak about a certain topic with a patient, prior to discharge or leaving an appointment
- Prompt users to recommend and even order hepatitis B vaccination prior to printing the AVS by creating a rule that requires documentation before an encounter can be closed
- Use the prompt functionality to create an order for a vaccination to help ensure your patients are started on their routine hepatitis B vaccine series before they leave the visit
- Counsel patients on routine vaccinations at every encounter as a critical preventative care strategy

HEPATITIS B VACCINATION - IMPLEMENTATION CHECKLIST

- Select title of alert: Routine Hepatitis B Vaccination Consultation
- Include key message: Let your patients know they are recommended to receive hepatitis B vaccination
- Select inclusion criteria for vaccination eligibility based on:
 - Patient Age: Patients aged 19 years and older^{1*}
- Select exclusion criteria for vaccination eligibility based on:
 - Patient Age: Patients aged 18 years and younger¹ OR
 - Contraindications to Hepatitis B Vaccination OR
 - Hepatitis B Vaccination History: Completion of hepatitis B vaccine series
- Include product details for the hepatitis B vaccine on your health system's formulary:
 - Vaccine Product
 - Number of Doses
 - Dosing Interval
 - Vaccination Type: Hepatitis B vaccine
- Set the rule as a hard stop to ensure user engagement with adult patients recommended to receive hepatitis B vaccination

CDC, Centers for Disease Control and Prevention.

*In order to comply with Boolean logic and address shared decision making, consider flagging adults aged 60 years and older without risk factors as *recommended to receive* hepatitis B vaccination.

GUIDANCE FOR THE IMPLEMENTATION OF EPIC FEATURES AND TOOLS HEALTH MAINTENANCE ALERT



DECISION SUPPORT TOOL > Passive Notification

Health Maintenance Alerts are preventive care tracking tools that help healthcare team members identify care gaps, including MISSING and OVERDUE vaccinations.

CONSIDERATIONS

- Automate a Health Maintenance Alert for adult hepatitis B vaccination so that healthcare team members can stay on track with the updated vaccine recommendations
- Only vaccinations documented within the patient's chart will be recognized by this alert type
- To ensure users receive correct vaccination schedules for their patients, confirm the vaccine product details are entered into the alert specifications
- Activate Health Maintenance Alerts for pharmacists and nurses - they can recommend and/or administer vaccines

HEPATITIS B VACCINATION - IMPLEMENTATION CHECKLIST

- Select title of alert:** IMPORTANT: Recommendation to Receive Routine Hepatitis B Vaccination

- Include key message:** Your patient is [RECOMMENDED to receive/OVERDUE for/MISSING A DOSE of] routine hepatitis B vaccination

- Select inclusion criteria for vaccination eligibility based on:**
 - **Patient Age:** Patients aged 19 years and older^{1*} **AND**
 - **Hepatitis B Vaccination History:** No history of vaccination

- Select exclusion criteria for vaccination eligibility based on:**
 - **Patient Age:** Patients aged 18 years and younger¹ **OR**
 - **Contraindications to Hepatitis B Vaccination** **OR**
 - **Hepatitis B Vaccination History:** Completion of hepatitis B vaccine series

- Include product details for the hepatitis B vaccine on your health system's formulary:**
 - **Vaccine Product**
 - **Number of Doses**
 - **Dosing Interval**
 - **Vaccination Type:** Hepatitis B vaccine

- Indicate where the alert should be displayed (ie, Health Maintenance Activity, Best Practice Advisories, Snapshot Report), when they will appear, and the action needed to satisfy the alert**

CDC, Centers for Disease Control and Prevention.

*In order to comply with Boolean logic and address shared decision making, consider flagging adults aged 60 years and older without risk factors as *recommended to receive* hepatitis B vaccination.

GUIDANCE FOR THE IMPLEMENTATION OF EPIC FEATURES AND TOOLS SMART SETS



DECISION SUPPORT TOOL > Order Entry

SmartSets provide streamlined order entry workflow by including all necessary individual orders associated with specified clinical care outcomes into one submission, such as lab tests, x-rays, medications, vaccinations, and consultations.

CONSIDERATIONS

- Leverage unique SmartSet capabilities for vaccination orders by including the option to print patient handouts and Vaccine Information Statements (VIS), schedule patients' follow-up hepatitis B vaccine dose(s), as well as counsel patients
- Utilize narrow selection functionality when creating vaccination order fields to help streamline provider workflow – allow providers to select the preferred product as the only choice
- For added workflow efficiency in the outpatient setting, integrate SmartSets into well-visit templates
- Patient education can be set up as part of Immunization SmartSets using an Immunization SmartGroup
- Utilize a [hepatitis B-specific BPA](#) to link to an Immunization SmartSet
- Activate SmartSets for pharmacists and nurses - they may be permitted to enter SmartSets for cosign by providers*

HEPATITIS B VACCINATION – IMPLEMENTATION CHECKLIST

- Create a new SmartGroup or edit an existing SmartGroup, where applicable, within the SmartSet to add a vaccination or patient education
- Select inclusion criteria for vaccination eligibility based on:
 - **Patient Age:** Patients aged 19 years and older^{1†} **AND**
 - **Hepatitis B Vaccination History:** No history of vaccination
- Select exclusion criteria for vaccination eligibility based on:
 - **Patient Age:** Patients aged 18 years and younger¹ **OR**
 - **Contraindications to Hepatitis B Vaccination** **OR**
 - **Hepatitis B Vaccination History:** Completion of hepatitis B vaccine series
- Include product details for the hepatitis B vaccine on your health system's formulary:
 - **Vaccine Product**
 - **Number of Doses**
 - **Dosing Interval**
 - **Vaccination Type:** Hepatitis B vaccine

CDC, Centers for Disease Control and Prevention.

*Not all health systems allow pharmacists and/or nurses to enter orders for cosign by providers. Check with your health system's policy before granting access to these user groups. [†]In order to comply with Boolean logic and address shared decision making, consider flagging adults aged 60 years and older without risk factors as *recommended to receive* hepatitis B vaccination.

GUIDANCE FOR THE IMPLEMENTATION OF EPIC FEATURES AND TOOLS PATIENT STORYBOARD



CHART FUNCTIONALITY > Passive Notification

The Patient Storyboard is a customizable feature that appears on the left side of patient charts. It provides an overview of patient details, including demographics, problem list, current diagnosis, and social determinants.

CONSIDERATIONS

- Leverage the Patient Storyboard to flag missing routine vaccinations and/or vaccination series, like hepatitis B, in yellow
- Consider training providers to refer to the care gaps section of the Patient Storyboard to assess vaccination history
- With the Patient Storyboard, all healthcare team members have the ability to assess OVERDUE and MISSING vaccinations

HEPATITIS B VACCINATION – IMPLEMENTATION CHECKLIST

Select inclusion criteria for vaccination eligibility based on:

- **Patient Age:** Patients aged 19 years and older^{1*} **AND**
- **Hepatitis B Vaccination History:** No history of vaccination

Select exclusion criteria for vaccination eligibility based on:

- **Patient Age:** Patients aged 18 years and younger¹ **OR**
- **Contraindications to Hepatitis B Vaccination** **OR**
- **Hepatitis B Vaccination History:** Completion of hepatitis B vaccine series

Include product details for the hepatitis B vaccine on your health system's formulary:

- **Vaccine Product**
- **Number of Doses**
- **Dosing Interval**
- **Vaccination Type:** Hepatitis B vaccine

Indicate where the alert should be displayed (ie, Health Maintenance Activity, Best Practice Advisories, Snapshot Report), when they will appear, and the action needed to satisfy the alert

CDC, Centers for Disease Control and Prevention.

*In order to comply with Boolean logic and address shared decision making, consider flagging adults aged 60 years and older without risk factors as *recommended to receive* hepatitis B vaccination.

GUIDANCE FOR THE IMPLEMENTATION OF EPIC FEATURES AND TOOLS PATIENT IMMUNIZATION RECORD (LIM)



DECISION SUPPORT TOOL > Tab in patient chart

The LIM tab houses details of vaccination records, including those from manual entry, immunization registries, medication administration records, and the immunization activity screen.

CONSIDERATIONS

- Direct healthcare team members to this tab by using a [Health Maintenance Alert](#) – it's important to document prior hepatitis B vaccinations to track series completion!
- Ensure access to this tab from multiple locations within the patient's chart
- Grant all healthcare team members access to the Patient Immunization Record to allow them to help screen patient vaccination status

HEPATITIS B VACCINATION – IMPLEMENTATION CHECKLIST

- Create a LIM BPA to remind your healthcare team to review the LIM – [click here](#) to learn how BPAs can be leveraged for hepatitis B vaccination reminders!

- Select inclusion criteria for vaccination eligibility based on:
 - Patient Age: Patients aged 19 years and older^{1*} **AND**
 - Hepatitis B Vaccination History: No history of vaccination

- Select exclusion criteria for vaccination eligibility based on:
 - Patient Age: Patients aged 18 years and younger¹ **OR**
 - Contraindications to Hepatitis B Vaccination **OR**
 - Hepatitis B Vaccination History: Completion of hepatitis B vaccine series

BPA, best practice alert; CDC, Centers for Disease Control and Prevention.

*In order to comply with Boolean logic and address shared decision making, consider flagging adults aged 60 years and older without risk factors as *recommended to receive* hepatitis B vaccination.

GUIDANCE FOR THE IMPLEMENTATION OF EPIC FEATURES AND TOOLS REPORTS



CHART FUNCTIONALITY > Report (eg, .xls, .cvs)

Report functionality can allow users to search patient database within a health system as per selected criteria.

CONSIDERATIONS

- Develop a report that tracks hepatitis B vaccinations within your health system
- Utilize relevant filters to select/sort patients within the EHR
- Mark your Adult Hepatitis B Vaccination Status report as a favorite for quick and easy access

HEPATITIS B VACCINATION – IMPLEMENTATION CHECKLIST

- Select title of report: Adult Hepatitis B Vaccination Status
- Select inclusion criteria for vaccination eligibility based on:
 - Patient Age: Patients aged 19 years and older^{1*} **AND**
 - Hepatitis B Vaccination History: No history of vaccination
- Select exclusion criteria for vaccination eligibility based on:
 - Patient Age: Patients aged 18 years and younger¹ **OR**
 - Contraindications to Hepatitis B Vaccination **OR**
 - Hepatitis B Vaccination History: Completion of hepatitis B vaccine series
- Set up filters to extract relevant data for user, including but not limited to:
 - Associated provider
 - Patient population
 - Adults aged 19–59 years
 - Adults aged 60 years and older with risk factors[‡]
 - Adults aged 60 years and older without risk factors
 - Patient location (eg, adult outpatient clinic, emergency department)
 - Vaccine product and doses completed
 - Date range

CDC, Centers for Disease Control and Prevention; EHR, electronic health record.

*In order to comply with Boolean logic and address shared decision making, consider flagging adults aged 60 years and older without risk factors as *recommended to receive* hepatitis B vaccination.

[‡]Please refer to the hepatitis B vaccination guidelines noted in the *MMWR* publication for the specific factors that increase risk for hepatitis B.¹

GUIDANCE FOR THE IMPLEMENTATION OF EPIC FEATURES AND TOOLS MYCHART MESSAGES



CHART FUNCTIONALITY > Patient Portal

MyChart Messages is Epic's patient portal, where patients can see upcoming appointments, prescriptions due for refill, and overdue vaccinations. An inbox feature allows providers to send personalized reminder messages for vaccinations and screenings through the MyChart Messages system.

CONSIDERATIONS

- Automate provider messaging to decrease provider burden of manual messaging
- Use population health strategies, like [SlicerDicer](#), to send vaccine reminders as a bulk message to your eligible patients!

HEPATITIS B VACCINATION – IMPLEMENTATION CHECKLIST

Select title of MyChart Message: Hepatitis B Vaccination

Sample message copy:

- You are RECOMMENDED to receive hepatitis B vaccination. Schedule an appointment to receive a hepatitis B vaccine by clicking here
- You are OVERDUE for your second hepatitis B vaccination dose. Schedule an appointment to receive a hepatitis B vaccine by clicking here
- You have NOT COMPLETED your routine hepatitis B vaccination series. Schedule an appointment to receive a hepatitis B vaccine by clicking here

Select inclusion criteria for vaccination eligibility based on:

- **Patient Age:** Patients aged 19 years and older¹ **AND**
- **Hepatitis B Vaccination History:** No history of vaccination

Select exclusion criteria for vaccination eligibility based on:

- **Patient Age:** Patients aged 18 years and younger¹ **OR**
- **Contraindications to Hepatitis B Vaccination** **OR**
- **Hepatitis B Vaccination History:** Completion of hepatitis B vaccine series

CDC, Centers for Disease Control and Prevention.

*In order to comply with Boolean logic and address shared decision making, consider flagging adults aged 60 years and older without risk factors as *recommended to receive* hepatitis B vaccination.

GUIDANCE FOR THE IMPLEMENTATION OF EPIC FEATURES AND TOOLS SLICERDICER, HEALTHY PLANET, CHEERS, BULK MESSAGE, BULK ORDER



POPULATION HEALTH STRATEGIES > Reporting tools, databases and bulk actions

Epic has a set of newer reporting tools, databases, and bulk actions that allow healthcare teams the ability to understand outcomes data at the health system level.

- **Healthy Planet:** Module that contains reporting functionalities, dashboards, and workflow tools that compile patient data based on selected criteria, for example the tracking implementation of vaccination strategies
- **SlicerDicer:** Self-service reporting tool with customizable data exploration capabilities. Users can search free text or select from a list of predefined search criteria. Queries can be exported to Healthy Planet, where Bulk Message and Bulk Order functionalities can be leveraged
- **Cheers:** Epic's customer relationship management software add-on that facilitates communication with patients via campaigns
- **Bulk Message:** Allows providers to send the same message via MyChart Messages to all patients within an identified group, as identified using SlicerDicer
- **Bulk Order:** Allows providers to order the same medication or vaccination product for all patients within an identified group, as identified using SlicerDicer

HEPATITIS B VACCINATION – IMPLEMENTATION CHECKLIST

Select inclusion criteria for vaccination eligibility based on:

- **Patient Age:** Patients aged 19 years and older^{1*} **AND**
- **Hepatitis B Vaccination History:** No history of vaccination

Select exclusion criteria for vaccination eligibility based on:

- **Patient Age:** Patients aged 18 years and younger¹ **OR**
- **Contraindications to Hepatitis B Vaccination** **OR**
- **Hepatitis B Vaccination History:** Completion of hepatitis B vaccine series

Select title of Bulk Message: Hepatitis B Vaccination

Sample message copy:

- You are **RECOMMENDED** to receive hepatitis B vaccination. Schedule an appointment to receive a hepatitis B vaccine by clicking here
- You are **OVERDUE** for your second hepatitis B vaccination dose. Schedule an appointment to receive a hepatitis B vaccine by clicking here
- You have **NOT COMPLETED** your routine hepatitis B vaccination series. Schedule an appointment to receive a hepatitis B vaccine by clicking here

For the Bulk Order, select the vaccine product that is on your health system's formulary

CDC, Centers for Disease Control and Prevention.

*In order to comply with Boolean logic and address shared decision making, consider flagging adults aged 60 years and older without risk factors as *recommended to receive* hepatitis B vaccination.

EPIC REFERENCE GUIDE

TAKE THE NEXT STEP

Help your team implement the CDC's adult hepatitis B vaccine policy with the key features and tools outlined in this document.



STEP 1 | COMMUNICATE

Early and often across multiple channels

[Click here](#) or scan the QR code to access and use communication templates



STEP 2 | EDUCATE

Staff about the CDC policy on universal adult hepatitis B vaccination^{1*}

For educational resources, [click here](#) or scan the QR code



STEP 3 | EVALUATE

Progress toward implementation goals

For tips on tracking your goals, [click here](#) or scan the QR code



CDC, Centers for Disease Control and Prevention.

*The CDC Advisory Committee on Immunization Practices (ACIP) updated its guidelines to recommend that all adults aged 19–59 years should receive hepatitis B vaccination. Additionally, all adults aged 60 years and older with risk factors for hepatitis B infection should be vaccinated. Adults aged 60 years and older without known risk factors may receive hepatitis B vaccination.¹

References: 1. Weng MK, Doshani M, Khan MA, et al. Universal hepatitis B vaccination in adults aged 19–59 years: updated recommendations of the Advisory Committee on Immunization Practices – United States, 2022. *MMWR Morb Mortal Wkly Rep.* 2022;71(13):477-483. 2. Murthy N, Wodi AP, Bernstein H, McNally V, Cineas S, Ault K. Advisory Committee on Immunization Practices Recommended Immunization Schedule for Adults Aged 19 Years or Older – United States, 2022. *MMWR Morb Mortal Wkly Rep.* 2022;71:229–233. 3. Data on file. Dynavax Technologies Corporation; 2022. 4. Hepatitis B Foundation. Do you know your hepatitis facts from fiction? May 7, 2014. Accessed January 11, 2023. <https://www.hepb.org/blog/do-you-know-your-hepatitis-facts-from-fiction/> 5. Hepatitis B Foundation. Hepatitis B facts and figures. Accessed January 11, 2023. <https://www.hepb.org/what-is-hepatitis-b/what-is-hepb/facts-and-figures/> 6. Hepatitis B virus: a comprehensive strategy for eliminating transmission in the United States through universal childhood vaccination. Recommendations of the Immunization Practices Advisory Committee (ACIP). *MMWR Recomm Rep.* 1991;40(RR-13):1-25. 7. He W-Q, Guo GN, Li C. The impact of hepatitis B vaccination in the United States, 1999–2018. *Hepatology.* 2022;75(6):1566-1578.

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