II Actualització Malaltíes Infeccioses a l'Atenció Primària

Albert Boada i Valmaseda

Metge de família i Comunitària

Barcelona, 28 de març de 2025

SITUACIÓ ACTUAL

Global hepatitis report 2024: action for access in low- and middle-income countries. Geneva: World Health Organization; 2024. Licence: CC BY-NC-SA 3.0 IGO.

CÀRREGA DE LA MALALTIA

- 1.3 MILIONS DE MORTS PER HEPATITIS
  - 87 % HEPATITIS B
  - 13% HEPATITIS C
- 2.2 MILIONS DE NOUS INFECTATS
  - 1.2 M HEPATITIS B
  - 1.0 M HEPATITIS C
- 304 MILIONS VIUEN AMB HEPATITIS B O HEPATITIS C (12% NENS VHB)

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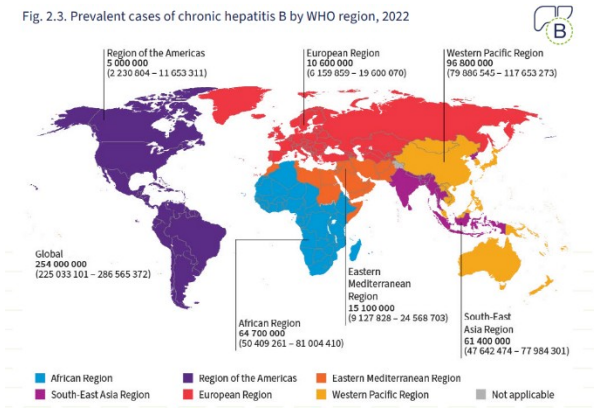
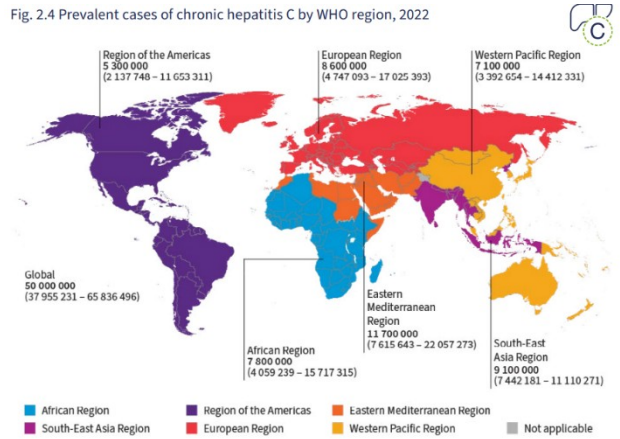
• CÀRREGA DE LA MALALTIA

- ÀFRICA → 63% NOVA HEPATITIS B → 18% REP VACUNA AL NÀIXER
- PACÍFIC OEST → 47% MORTS HEPATITIS B → BAIXA COBERTURA TRACTAMENTS
- PAÏSOS ALTA RENDA (USA) → INCREMENTA HEPATITIS C (UDVP)
  - 13% VHB DIAGNOSTICATS
  - 36% VHC DIAGNOSTICATS





Global hepatitis report 2024: action for access in low- and middle-income countries. Geneva: World Health Organization; 2024. Licence: CC BY-NC-SA 3.0 IGO.

• CÀRREGA DE LA MALALTIA

- TENOFOVIR DISOPROXIL FUMARATE (TDF) → HEPATITIS B
- SOFOSBUVIR/ DACLATASVIR (SOF/DAC) → HEPATITIS C

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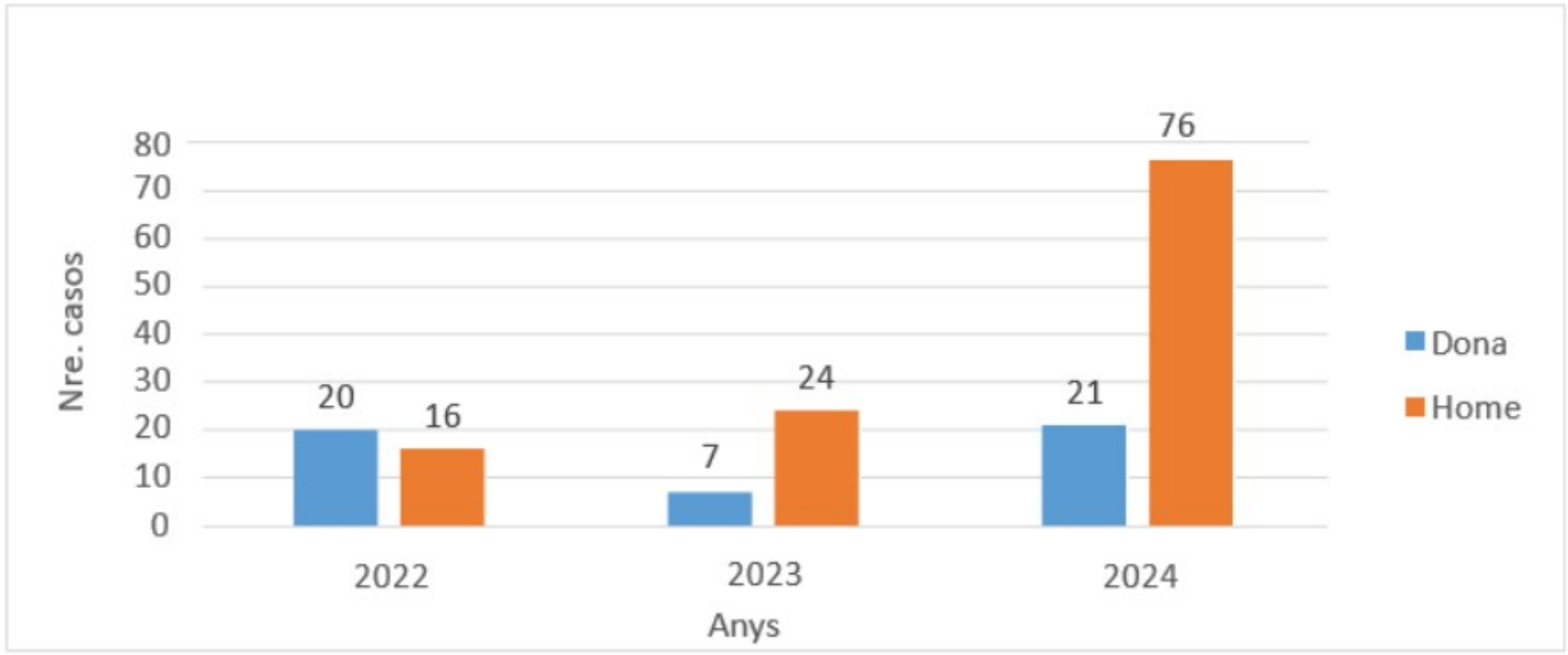
• CÀRREGA DE LA MALALTIA

HEPATITIS A → CATALUNYA



Font: Xarxa de Vigilància Epidemiològica de Catalunya (XVEC). ASPCAT. Departament de Salut.

Ferrer Calanda A, Izquierdo Gomez C, Martínez Mateo A, Mendioroz Peña J. Situació epidemiològica de l'hepatitis A: Catalunya, 2022-2024. Barcelor
Subdirecció General de Vigilància i Resposta a Emergències de Salut Pública; 2025

• REVISIÓ

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ORIGINAL

Manejo en atención primaria de las infecciones de transmisión sexual (III). Hepatitis víricas e infección por el VIH

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PALABRAS CLAVE
Infecciones de transmisión sexual;
Atención primaria;
Infección por virus de inmunodeficiencia humana (VIH);
Hepatitis víricas

Resumen La obtención rutinaria de una historia sexual es un primer paso necesario para identificar qué pacientes tienen comportamientos sexuales específicos que pueden ponerlos en riesgo y utilizar medidas de protección adecuadas sobre todo en poblaciones vulnerables. Sin embargo, el diagnóstico tardío de la infección por VIH sigue siendo muy elevado. Las estrategias de prevención combinada basadas en la promoción del preservativo, los programas de reducción de daños en las personas que se inyectan drogas (PID) más la profilaxis preexposición (PrEP) y la promoción de la profilaxis pos-exposición (PPE) del VIH son las mejores opciones para prevenir nuevas infecciones. El cribado de las infecciones de transmisión sexual (ITS) (incluyendo los virus hepatotropos) y el diagnóstico y tratamiento tempranos son fundamentales para la persona puesto que mejora el pronóstico y las complicaciones y también para la comunidad porque rompe la cadena de transmisión. Las personas que viven con el VIH y que tienen una carga viral indetectable no transmiten el virus por vía sexual (indetectable=intransmisible).

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0212-6567/

Carrillo Muñoz R, Agustí Benito C, de la Poza Abad M, Mascort Roca J. Manejo en atención primaria de las infecciones de transmisión sexual (III). Hepatitis víricas e infección por el VIH [Primary care management of sexually transmitted infections (III). Viral hepatitis and HIV infection]. Aten Primaria. 2025 Jan;57(1):103048. Spanish. doi: 10.1016/j.aprim.2024.103048. Epub 2024 Sep 13. PMID: 39276681; PMCID: PMC11417142.

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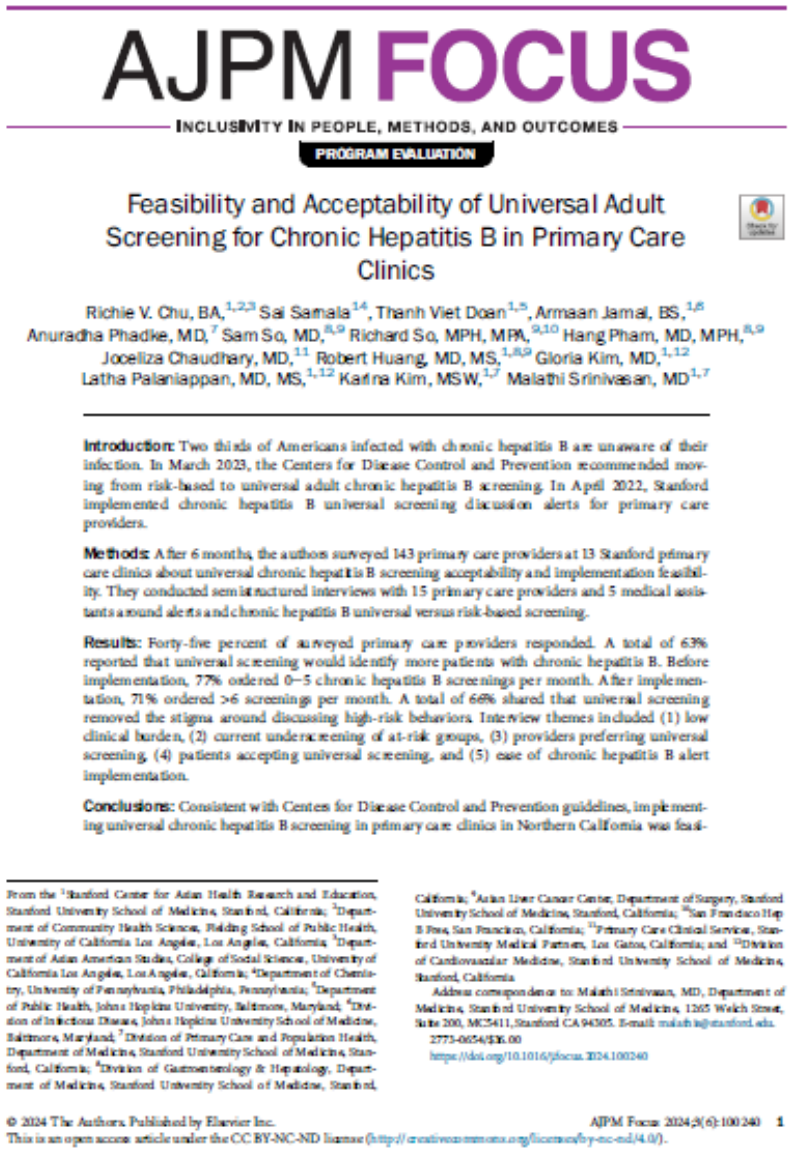

AJPM FOCUS
INCLUSIVITY IN PEOPLE, METHODS, AND OUTCOMES
PROGRAM EVALUATION

Feasibility and Acceptability of Universal Adult Screening for Chronic Hepatitis B in Primary Care Clinics

Richie V. Chu, BA,[1,2,3] Sai Sarnala[1,4], Thanh Viet Doan[1,5], Armaan Jamal, BS,[1,6] Anuradha Phadke, MD,[7] Sam So, MD,[8,9] Richard So, MPH, MPA,[9,10] Hang Pham, MD, MPH,[8,9] Jocelliza Chaudhary, MD,[11] Robert Huang, MD, MS,[1,8,9] Gloria Kim, MD,[1,12] Latha Palaniappan, MD, MS,[1,12] Karina Kim, MSW,[1,7] Malathi Srinivasan, MD[1,7]

Introduction: Two thirds of Americans infected with chronic hepatitis B are unaware of their infection. In March 2023, the Centers for Disease Control and Prevention recommended moving from risk-based to universal adult chronic hepatitis B screening. In April 2022, Stanford implemented chronic hepatitis B universal screening discussion alerts for primary care providers.

Methods: After 6 months, the authors surveyed 143 primary care providers at 13 Stanford primary care clinics about universal chronic hepatitis B screening acceptability and implementation feasibility. They conducted semi-structured interviews with 15 primary care providers and 5 medical assistants around alerts and chronic hepatitis B universal versus risk-based screening.

Results: Forty-five percent of surveyed primary care providers responded. A total of 63% reported that universal screening would identify more patients with chronic hepatitis B. Before implementation, 77% ordered 0–5 chronic hepatitis B screenings per month. After implementation, 71% ordered >6 screenings per month. A total of 66% shared that universal screening removed the stigma around discussing high-risk behaviors. Interview themes included (1) low clinical burden, (2) current underscreening of at-risk groups, (3) providers preferring universal screening, (4) patients accepting universal screening, and (5) ease of chronic hepatitis B alert implementation.

Conclusions: Consistent with Centers for Disease Control and Prevention guidelines, implementing universal chronic hepatitis B screening in primary care clinics in Northern California was feasi-

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2773-0654/$36.00
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Chu RV, Sarnala S, Doan TV, Jamal A, Phadke A, So S, So R, Pham H, Chaudhary J, Huang R, Kim G, Palaniappan L, Kim K, Srinivasan M. Feasibility and Acceptability of Universal Adult Screening for Chronic Hepatitis B in Primary Care Clinics. AJPM Focus. 2024 May 17;3(6):100240. doi: 10.1016/j.focus.2024.100240. PMID: 39582739; PMCID: PMC11584556.

CRIBRATGE

- 2/3 INFECTATS A USA NO CONEIXEN LA SEVA INFECCIÓ
- CDC RECOMANA CRIBRATGE UNIVERSAL DE VHB MARÇ 2023. STANFORD INICIA 2022 PER APiC

MÈTODE

- 6 MESOS

- ENQUESTA A 143 PROVEÏDORS D'ATENCIÓ PRIMÀRIA DE 13 CLÍNIQUES D'APiC DE STANFORD SOBRE L'ACCEPTABILITAT I LA VIABILITAT DE LA IMPLEMENTACIÓ DEL CRIBRATGE UNIVERSAL DE L'HEPATITIS B CRÒNICA

- ENTREVISTES SEMIESTRUCTURADES AMB 15 PROVEÏDORS D'ATENCIÓ PRIMÀRIA I 5 ASSISTENTS MÈDICS AL VOLTANT D'ALERTES I DETECCIÓ UNIVERSAL D'HEPATITIS B CRÒNICA VERSUS DETECCIÓ BASADA EN EL RISC

RESULTATS

- 45 % RESPOSTES
- 63% CREUEN QUE AUGMENTA IDENTIFICACIÓ HEPATITIS B CRÒNICA
- 77% O-5 TESTS PRE
- 71% > 6 TESTS POST
- 66 % CREUEN QUE PERMET MILLORARA ESTIGMA PER PARLAR DE RISCS

RESULTATS- ENTREVISTA

- (1) baixa càrrega clínica
- (2) sub screening actual dels grups de risc
- (3) proveïdors que prefereixen cribratge universal
- (4) pacients que accepten el cribratge universal
- (5) facilitat d'implementació d'alerta d'hepatitis B crònica

CRIBRATGE

Short communication

JHEP Reports

Successful hepatitis B and C screening in the health check-up in the German primary care setting

Authors

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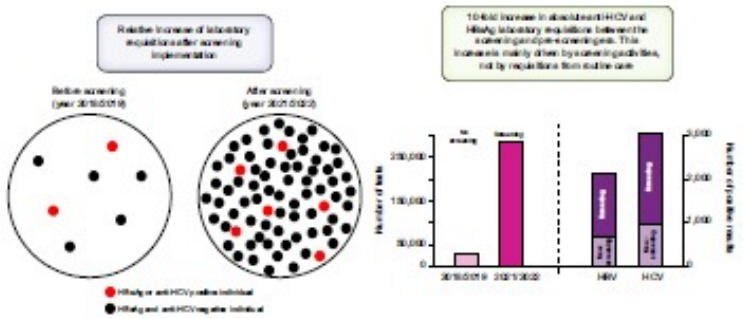
Graphical abstract



Highlights

- Screening efforts to diagnose unknown HBV and HCV infections in the general population are a major component of elimination efforts.
- A structured viral hepatitis screening program at the primary care level leads to large additional effects compared to routine care.
- Compared to 30,106 HBsAg and 31,266 anti-HCV lab requests in 2018, 286,192 tests were requested during the screening period.
- Prevalences of HBsAg, anti-HCV and HCV RNA were 0.54%, 0.79% and 0.13%, respectively, in the German population.

Impact and implications

Strategies to eliminate chronic hepatitis B and C virus infection are country specific and vary between clinical scenarios. Our analysis proves the efficacy of a screening program by primary care physicians compared to routine care in a low-prevalence country. This program should be accompanied by additional efforts in risk populations like people who inject drugs who are under-represented in the current screening approach.

https://doi.org/10.1016/j.jhepr.2024.101122

 JHEP Reports, 2024, 6, 1–5

Bätz O, Petroff D, Jedrysiak K, Wolffram I, Berg T, Kramer J, Wiegand J. Successful hepatitis B and C screening in the health check-up in the German primary care setting. JHEP Rep. 2024 May 24;6(9):101122. doi: 10.1016/j.jhepr.2024.101122. PMID: 39188540; PMCID: PMC11345383.

INTRODUCCIÓ

- OBJECTIU OMS→ ELIMINAR HEPATITIS C EL 2030
- INCLOURE CRIBRATGE A APiC A ALEMANYA PER VHB I VHC
- AVALUAR RESULTATS 1 ANY DESPRÉS IMPLEMENTACIÓ

MÈTODE

- CRIBRATGE AMB HBsAg/HBV DNA I anti-HCV/HCV RNA
- 286.192 PERSONES DE 11 EAPS
- SEPARATS PER CATEGORIES DE ÍNDEX SOCIO-ECONÒMIC

RESULTATS

- DES DE 30.106 HBs AG i 31.266 ANTI-HCV PETICIONS DEL 2018 A 286.192 TESTS

- VHC +
  - AUGMENTEN EN 35-44 ANYS DEL **98% HOMES** I **123 % DONES**
  - AUGMENTEN EN 75-84 DEL 518% **HOMES** I 514% **DONES**

RESULTATS

Table 1. Number of HBsAg-positive patients from October 2021 until September 2022 by sex, age and "screening status".

	Males			Females		
Age category (years)	Non-screening	Screening	Effect of screening: Increase of HBsAg-positive patients compared to the non-screening routine	Non-screening	Screening	Effect of screening: Increase of HBsAg-positive patients compared to the non-screening routine
35-44	108	169	156%	101	132	131%
45-54	106	205	193%	65	151	232%
55-64	83	202	243%	78	165	212%
65-74	47	142	302%	51	150	294%
75-84	14	43	307%	10	74	740%
>84	1	9	900%	4	21	525%

Table 2. Number of anti-HCV-positive patients from October 2021 until September 2022 by sex, age and "screening status".

	Males			Females		
Age category (years)	Non-screening	Screening	Effect of screening: Increase of anti-HCV positive patients compared to the non-screening routine	Non-screening	Screening	Effect of screening: Increase of anti-HCV positive patients compared to the non-screening routine
35-44	174	170	98%	96	118	123%
45-54	209	254	122%	97	198	204%
55-64	134	313	234%	95	299	315%
65-74	55	176	320%	56	212	379%
75-84	17	88	518%	29	149	514%
>84	4	24	600%	17	75	441%

RESULTATS

PREVALENÇA HBsAg I HBV DNA VA SER 0.54% I 0.39%

HBsAg + → 72.7% VAN SER HBV DNA +

PREVALENÇA anti-HCV I HCV RNA VA SER 0.79% I 0.13%

anti-HCV + → 16.3% VA SER HCV RNA +

TEST I TRACTAR

Gastro Hep Advances 2024;3:917–919

RESEARCH LETTER

Hepatitis C Virus (HCV) Test and Treat Training Improves HCV Screening Rates in Resident Associated Academic Primary Care Clinics

The World Health Organization tasked health systems to eliminate hepatitis C virus (HCV) as a public health threat by 2030. Specific goals include a 90% reduction in incidence and prevalence, treatment of 80% of eligible persons with chronic HCV, a 65% reduction in HCV-related deaths, and universal access to key prevention and treatment services. To meet elimination goals, 2020 United States Preventative Task Force guidelines expanded to recommend one-time screening for all adults aged 18-79 in addition to those with high-risk behaviors.[1]

Treatment consisting of pangenotypic direct-acting antivirals allows patients to receive a relatively short course of well-tolerated, highly efficacious, and often curative oral therapy. Their excellent safety profile and minimal need for monitoring allow nonspecialist providers such as nurses, pharmacists, and general practitioners to provide HCV treatment—expanding the pool of clinicians available to help achieve sustained virologic response (SVR).[1] Although HCV screening often falls to primary care practitioners (PCPs), most PCPs remain unaware of their ability to successfully treat HCV.[2] To increase treatment efforts in the primary care setting, the "ECHO" care pathway engages HCV specialists that support PCPs, often virtually, through a defined curriculum focused on mentorship and as needed consultation.[3,4] Other programs have trialed HCV treatment in primary care through directly training primary care providers in HCV management with overall high rates of SVR.[5–7] A limited number of studies evaluating the implementation of training curriculums specifically for resident physicians found a significant improvement in resident confidence in treating HCV[8] and high rates of SVR.[9]

To further increase the HCV provider pool, we developed an algorithm to train internal medicine resident physicians at our academic institution to both test for and treat HCV. We held training sessions in early 2023 and early 2024, reviewing updated HCV screening guidelines and teaching residents how to effectively treat HCV in their primary care continuity clinics. A survey was administered both before and after the training session to assess resident understanding and comfort levels with HCV screening and treatment. A "test-and-treat" protocol (Figure 1) was provided to residents to reference in future clinics. Specific parameters including fibrosis-4 index for liver fibrosis <1.45, negative HIV, and negative hepatitis b surface antigen, based on the American Association for the Study of Liver Diseases simplified guidelines for HCV treatment at the time,[10] were used to select patients appropriate for treatment in the resident primary care clinic setting; if these parameters were not met, referral to a specialist was recommended. Residents were also provided guidelines for monitoring via laboratory work and follow-up visits. Additionally, we developed a live dashboard to pull electronic medical record data on resident HCV screening and treatment practices to increase accountability (Figure A1).

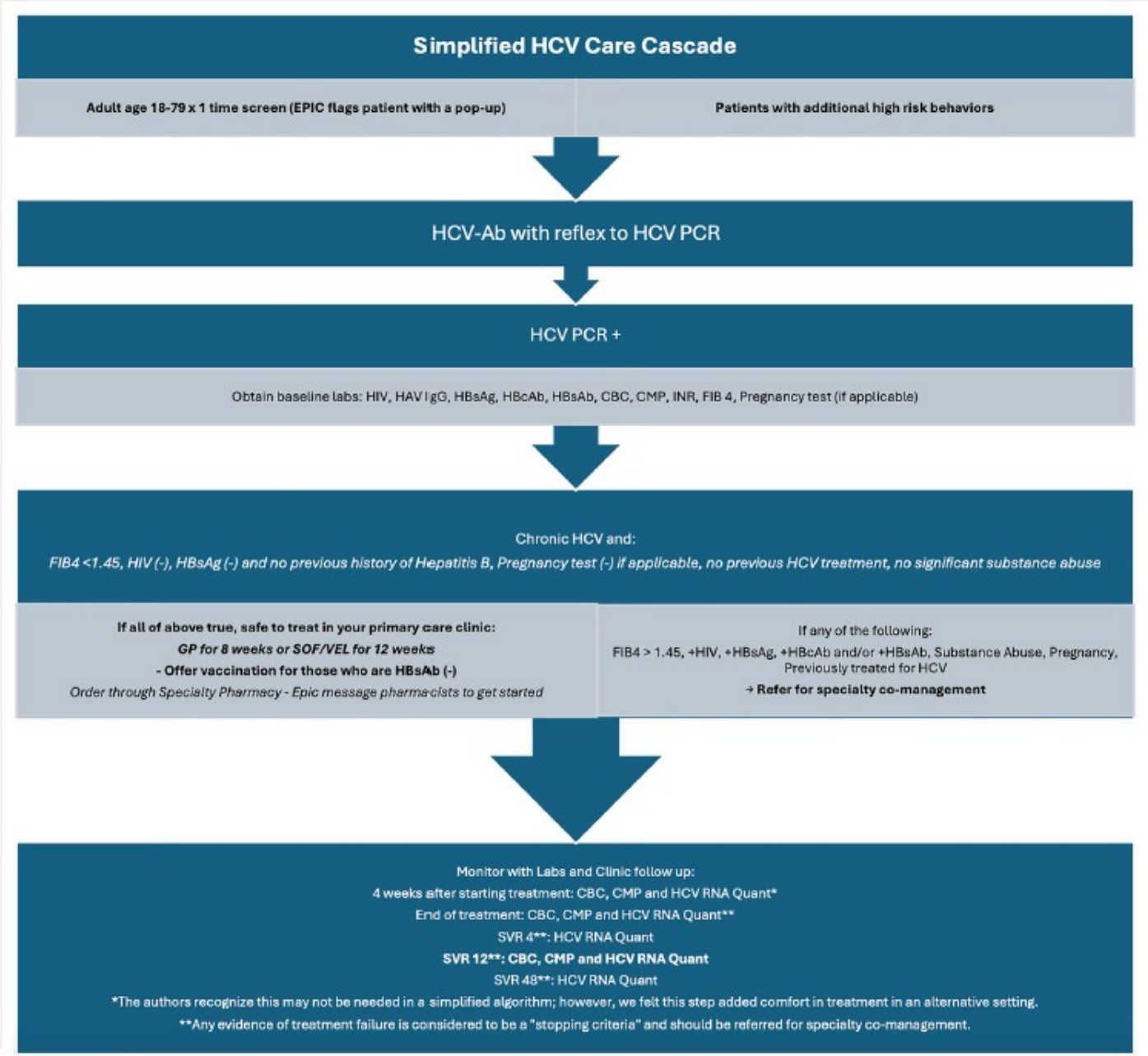
From January 1, 2021, to January 25, 2023 (pre-training), 4811 encounters in resident clinic had HCV screening due. Of these, 668 were appropriately screened (13.88%) and 10 were HCV antibody positive; two had positive RNA polymerase chain reactions and were both referred to hepatology (Table 1). In the first three months post-training, the HCV screening rate improved to 24.04% (151/628, $P < .0001$) and the antibody positivity rate increased from 1.50% to 2.65%. At six and 12 months, the improved screening rate held (24.31% and 20.97%, respectively). Since the initiation of the training program, no patients with positive RNA polymerase chain reaction have been detected. However, post-training, residents (n = 46) showed improved understanding of current HCV screening guidelines (56.5% → 100% correctly identified who should be screened) and management per the test-and-treat protocol (28.2% → 73.9% correctly identified referral parameters). Residents (n = 46) also felt significantly more comfortable prescribing HCV treatment post-training (mean comfort level on a Likert scale of 1-5 increased 1.78 → 3.87, $P < .0001$).

Despite significant increases in HCV screening rates, the overall rates remain inadequate. We therefore polled residents (n = 22) to determine the cause of infrequent testing. The most common response was "not going for any other bloodwork, decided to delay until next bloodwork due" (n = 12, 54.5%), followed by "patient declined" (n = 5, 22.7%) and "forgot" (n = 4, 18.2%). Delaying screening can lead to omission of screening if patients are lost to follow-up or establish care elsewhere. It was also noted that screening rates declined between 6 and 12 months, either due to lack of consistent practice or new, untrained resident physicians joining the clinic. These limitations emphasize the need for ongoing education in residency training.

Our study shows that the implementation of a test-and-treat algorithm in the primary care clinic significantly improves screening rates for HCV. A model that increases providers through an education mentoring network, such as a residency program, may be more effective than single-directed educational interventions. These residents can mentor incoming trainees and share their expertise at other practices after graduation. Moving the management of HCV to primary care increases access to HCV testing and treatment, especially in rural

Bellos EA, Post Z, Vahora R, Reau N. Hepatitis C Virus (HCV) Test and Treat Training Improves HCV Screening Rates in Resident Associated Academic Primary Care Clinics. Gastro Hep Adv. 2024 Jul 4;3(7):917-919. doi: 10.1016/j.gastha.2024.06.011. PMID: 39286615; PMCID: PMC11402280.

RESULTATS


Simplified HCV Care Cascade
Adult age 18-79 x 1 time screen (EPIC flags patient with a pop-up)
Patients with additional high risk behaviors
HCV-Ab with reflex to HCV PCR
HCV PCR +
Obtain baseline labs: HIV, HAV IgG, HBsAg, HBcAb, HBsAb, CBC, CMP, INR, FIB 4, Pregnancy test (if applicable)
Chronic HCV and:
FIB4 <1.45, HIV (-), HBsAg (-) and no previous history of Hepatitis B, Pregnancy test (-) if applicable, no previous HCV treatment, no significant substance abuse
If all of above true, safe to treat in your primary care clinic:
GP for 8 weeks or SOF/VEL for 12 weeks
- Offer vaccination for those who are HBsAb (-)
Order through Specialty Pharmacy - Epic message pharmacists to get started
If any of the following:
FIB4 > 1.45, +HIV, +HBsAg, +HBcAb and/or +HBsAb, Substance Abuse, Pregnancy, Previously treated for HCV
→ Refer for specialty co-management
Monitor with Labs and Clinic follow up:
4 weeks after starting treatment: CBC, CMP and HCV RNA Quant*
End of treatment: CBC, CMP and HCV RNA Quant**
SVR 4**: HCV RNA Quant
SVR 12**: CBC, CMP and HCV RNA Quant
SVR 48**: HCV RNA Quant
*The authors recognize this may not be needed in a simplified algorithm; however, we felt this step added comfort in treatment in an alternative setting.
**Any evidence of treatment failure is considered to be a "stopping criteria" and should be referred for specialty co-management.

RESULTATS

Table 1. Table Showing Data Pre- and Post-Test and Treat Training. Post-Training Order Data Included in This Table Is Pulled From the 6-Mo Post-Training Time Mark

Orders and survey data	Pretraining	Post-training	*P* Value
Orders			
HCV Ab orders	668/4811 (13.88%)	262/1075 (24.37%)	.0001
HCV Ab+	10/668 (1.50%)	7/262 (2.67%)	.229
RNA PCR+	2/10 (20.0%)	0/7 (0%)	.208
Survey data			
Correctly identified HCV screening guidelines	26/46 (56.5%)	46/46 (100%)	<.0001
Correctly identified referral parameters	13/46 (28.2%)	34/46 (73.9%)	<.0001
Mean comfort level (Likert scale 1-5) prescribing HCV medications	1.78/5	3.87/5	<.0001

PCR, polymerase chain reaction.

MOLTES GRÀCIES

CAMFiC
societat catalana de medicina familiar i comunitària