



HealthCare

ED HCV Specialty Pharmacy Test-to-Treat Program

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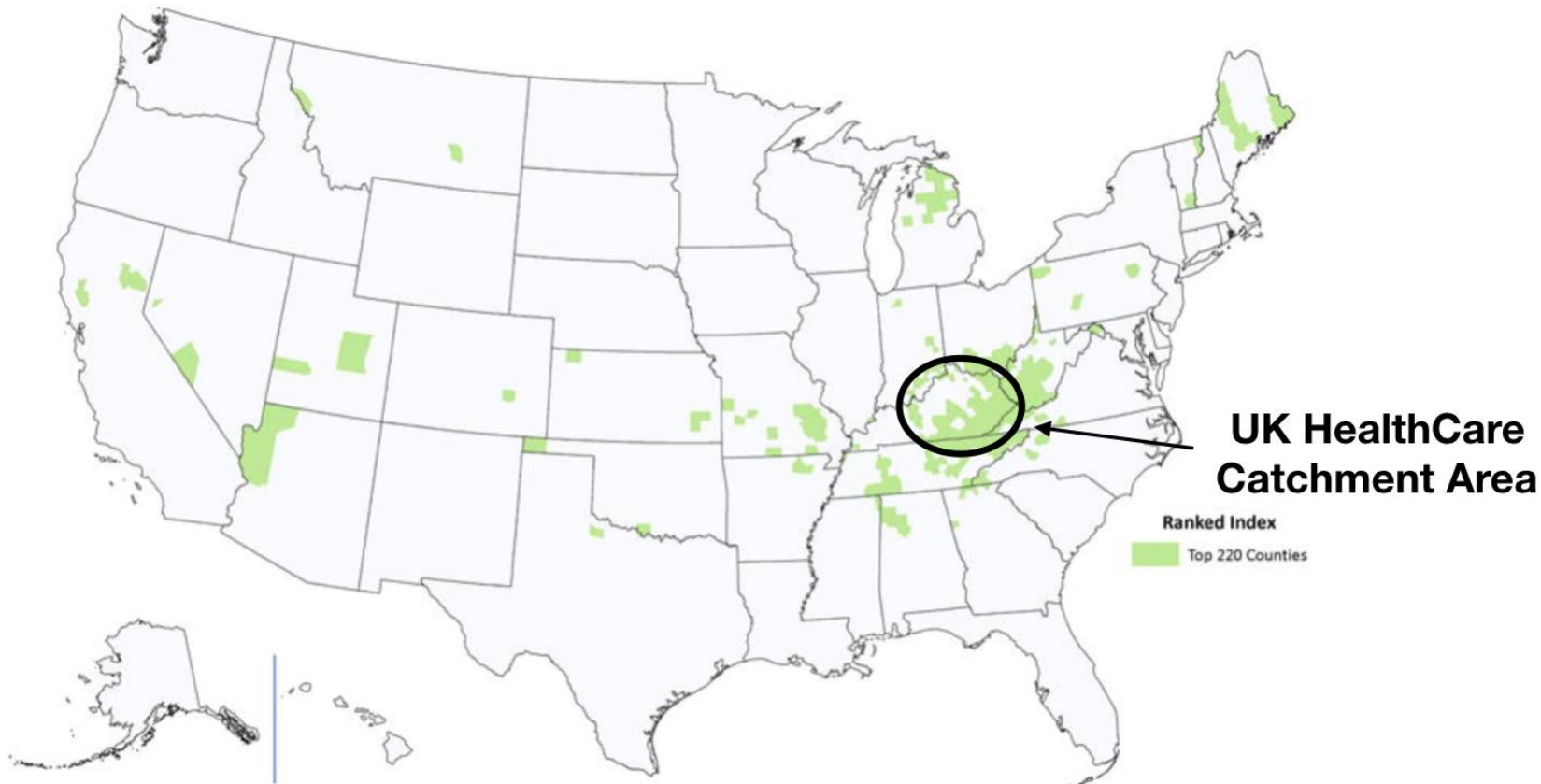
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DISCLOSURE

- Gilead FOCUS Grant and Salary Support*

*Gilead FOCUS had no role in my analysis of the continuum beyond first linkage

Background: The Syndemic Disproportionately affecting Appalachia



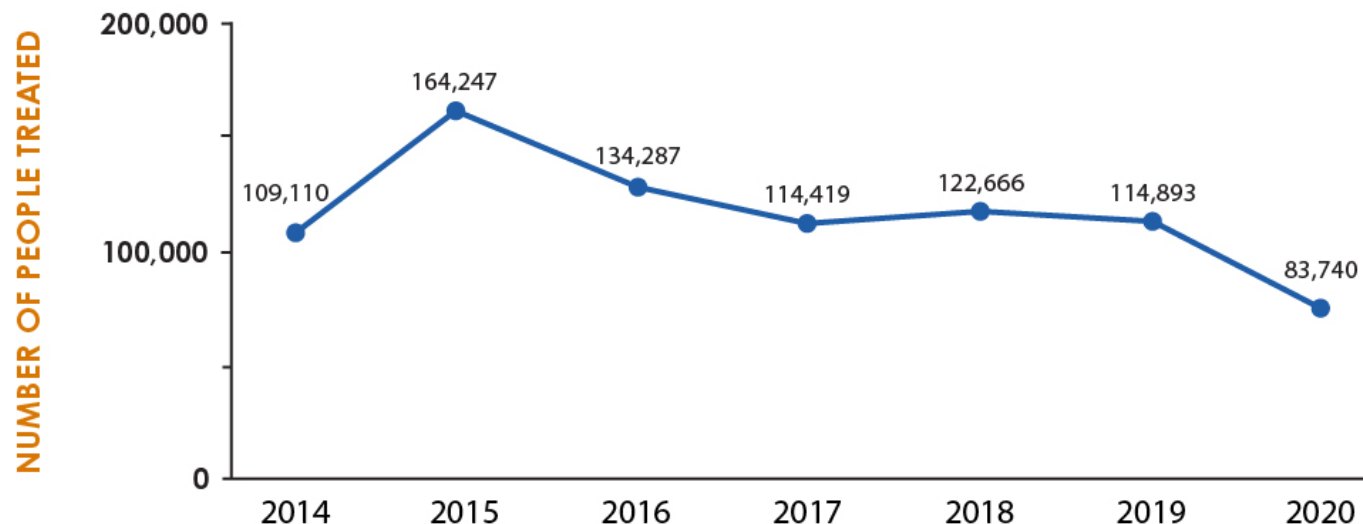
- HCV RNA positivity rates are **22% higher** in Appalachian counties
- ED HCV incidence is **33 times greater** than the general US population

54 Of Nation's Top 220 Counties At Highest Risk For Infectious Outbreak Are In KY

Background: National Treatment Failures

THE NUMBER OF PEOPLE WHO INITIATED* HEPATITIS C TREATMENT IN THE U.S. DECLINED FROM 2015 TO 2020

COVID-19-related disruptions to hepatitis C testing and treatment likely contributed to the decline in 2020



*Based on national prescription claims data

For more information, visit
[cdc.gov/nchhstp/newsroom](https://www.cdc.gov/nchhstp/newsroom)



- In 2015 the National Academies of Science and Medicine estimated 260,000* people needed to be treated annually to eliminate HCV by 2030

*likely an underestimate given years of undertreatment and increasing incidence

PHASE 1: Gilead FOCUS

Adult Non-Targeted ED HCV Screening BPA

Began July 2018

UK HealthCare

Program Offers Hepatitis C Screening for Patients in UK Emergency Department

By **Olivia Ramirez** March 7, 2019

1 of 2 <>



BPA Alert:
If no HCV result,
or negative result
more than 1 year old,
order repeat
screening

ED Policy:
HCV screening
annually

Adult Non-Targeted ED HCV Screening

Began July 2018

	GSH	CH	Total
Days Reported	1,757	1,822	1,822
Distinct count of Encounter ID	59,755	256,332	316,093
Unique Patients Screened	31,657	147,488	165,815
Unique Continued Patients	2,690	70,063	71,496
Continue Rate	5.0%	40.2%	33.5%
HCV Ab Results Received	11,705	97,033	108,738
HCV Ab invalid/indeterminate/no result	32	131	163
HCV Ab+	1,725	8,936	10,661
HCV Ab+ Rate	14.8%	9.2%	9.8%
RNA Results Received	1,780	8,938	10,718
HCV RNA invalid/indeterminate/no result	37	647	684
HCV RNA+	989	4,141	5,130
HCV RNA+ Rate	55.6%	46.3%	47.9%
RNA Positive Individuals Linked to Care	247	1,903	2,150

Of Those Treatment Eligible Who Are They?

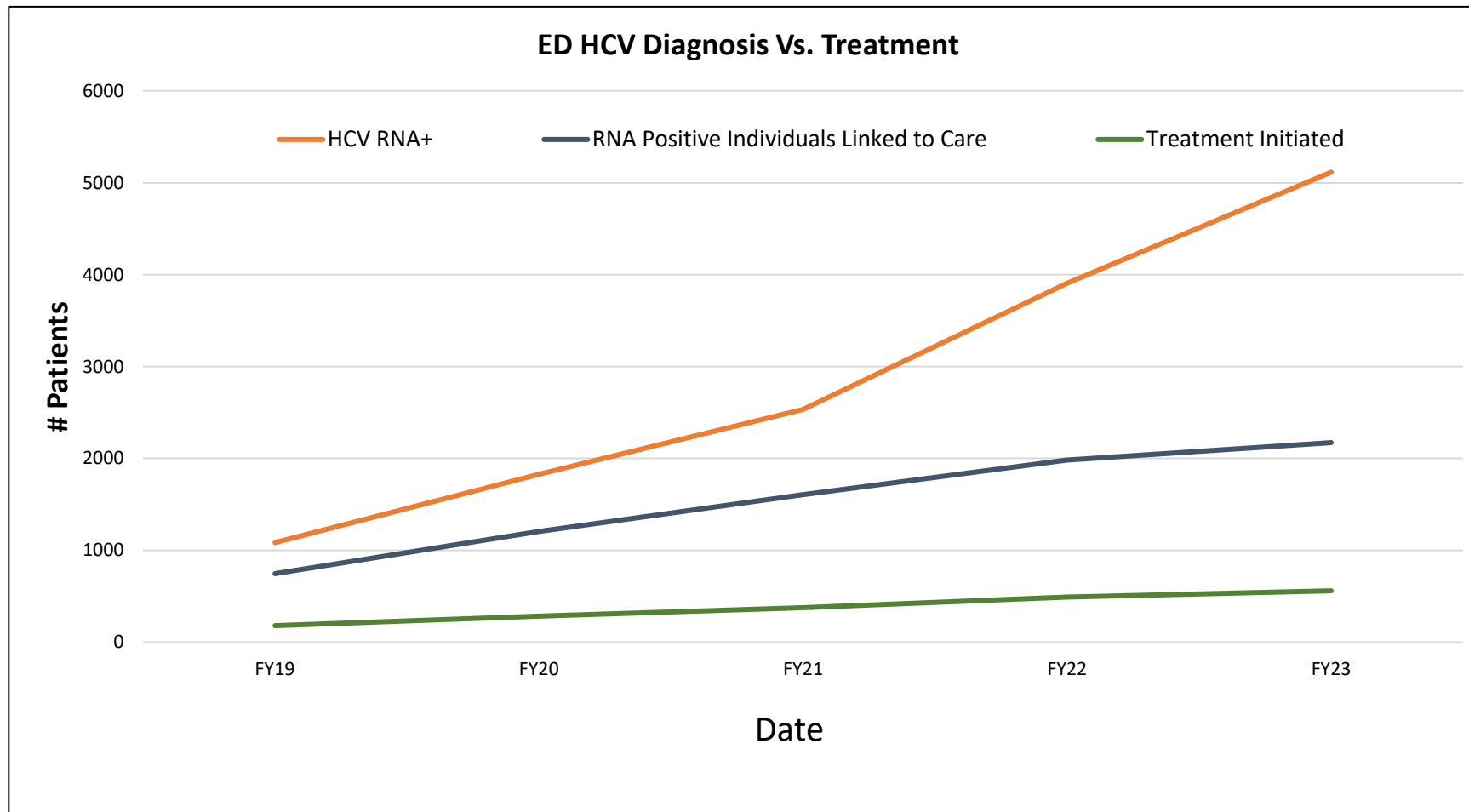
- **Young**
82% < 55 years old
- **Under/Uninsured**
73% Medicaid
20% Medicare, Uninsured, Self-Pay
- **Without Advanced Fibrosis**
85% FIB-4 < 3.25
63% FIB-4 < 1.4

← Treatment Eligible

*As of 7/13/23

UKHC Treatment Failures – Lost to Follow-Up

Novel Model of Care Needed



- **Only 10.89% treatment uptake** since inception – July 2018-May 2023 (557/5116)*
- Average diagnosis to Treatment Initiation: **421 days** (Standard Deviation **401 days**)
- Novel processes were needed as diagnosis rate cannot outpace cure rate in order to eradicate HCV
- **Vertically Aligned Total Care:** Patient, Provider, Pharmacy

PHASE 2: ED HCV Specialty Pharmacy – Treatment CCA

Began June 2023

Best Practice Alert modified:

“If Hep C Ab positive or previous HCV RNA positive, the UKSP ED HCV Team will order additional labs, FibroScan, and immunizations if appropriate per signed collaborative care agreement”

Collaborative Care Agreement:

Signed agreement between ED attendings and HCV pharmacists to initiate standardized algorithmic treatment work-up in the ED at the time HCV Ab+ is identified

ED HCV Specialty Pharmacy – Workflow

ED Team
Standardized Algorithmic Approach
(IDSA/AASLD)

GS HCV Ab+

CH HCV Ab+

Labs/Imaging/History

- HCV RNA
- CBC/CMP/INR
- Acute Hep Panel
- HIV
- US if concern for ascites/HCC
- HCG
- Elastography
- Cirrhosis
- Opioid Abuse

Provide Vaccinations

Existing RNA+ Outpatient

APP/Telehealth

Existing RNA+ Inpatient

ED Specialty Pharmacy

RNA+

Simple, Treatment-Naïve, No Cirrhosis

Treatment-Naïve Compensated Cirrhosis

ED Specialty Pharmacy

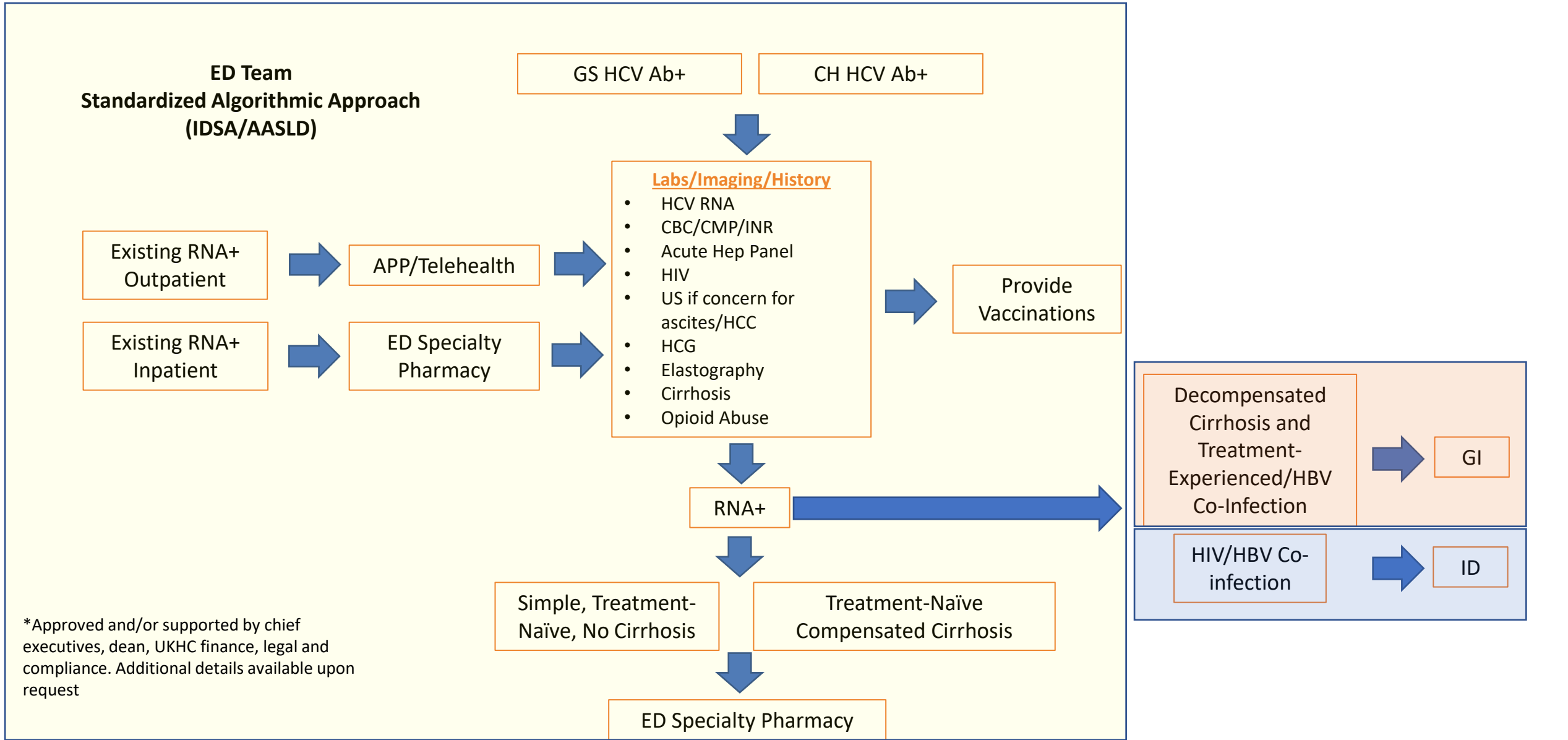
Decompensated Cirrhosis and Treatment-Experienced/HBV Co-Infection

GI

HIV/HBV Co-infection

ID

*Approved and/or supported by chief executives, dean, UKHC finance, legal and compliance. Additional details available upon request



ED HCV Specialty Pharmacy – Standard of Care

Five pharmacists in ED

- If workup is completed in ED, no clinic visit required before treatment

Advanced-practice provider in ED based HCV clinic

- Telehealth (including audio only) and in-person

Dedicated ED FibroScan

- Pharmacists trained to perform

Prompt referrals

- ID, Hepatology, addiction medicine, social work, primary care

Harm reduction resources

- By county

Hep A/B vaccines

- Including Heplisav



Reliably Estimating HCC Risk

More than one fibrosis tool to allow for comparison

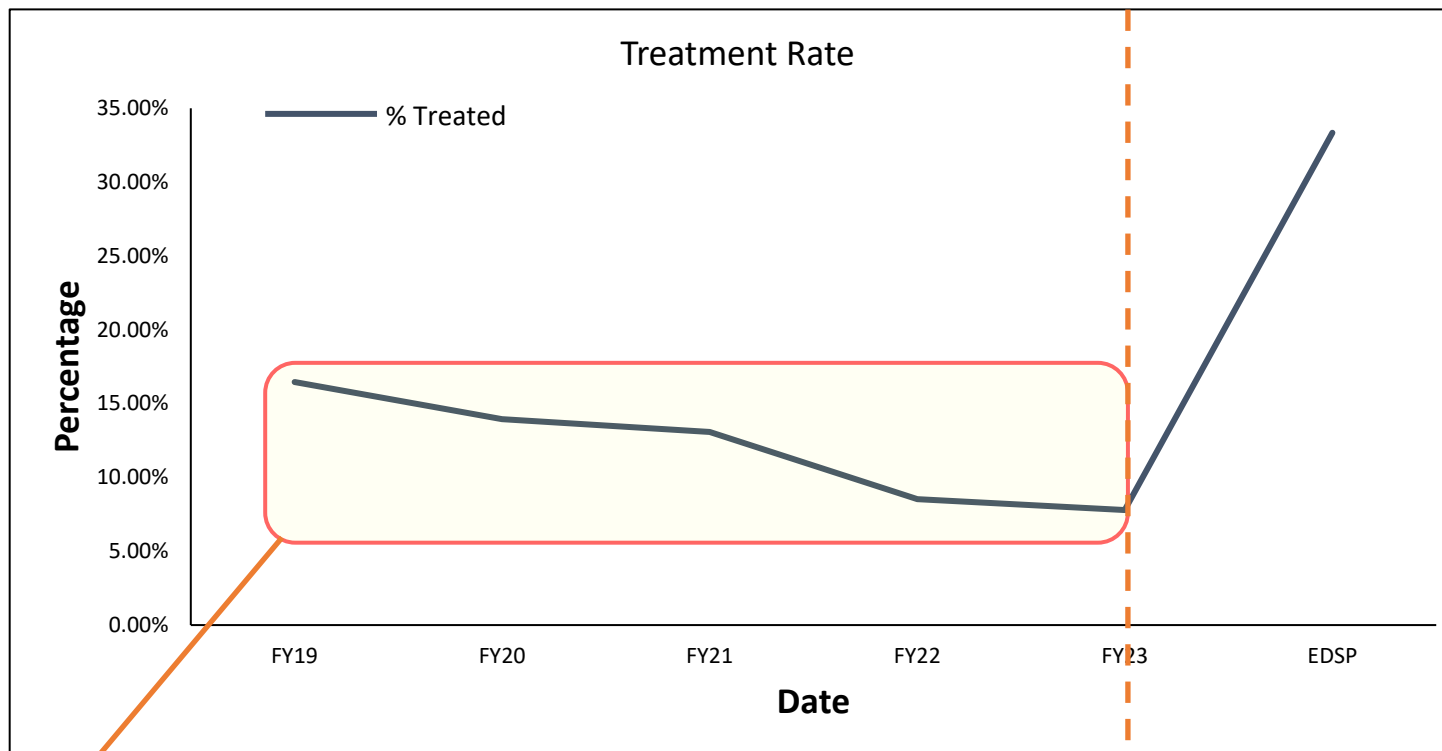
- FIB-4, FibroScan, and/or abdominal imaging
 - If kPa 12.5 to 19.9 and/or FIB-4 > 3.25
 - STAT US liver screen performed in ED to r/o HCC
 - If kPa 9.5+
 - Refer to Hepatology for ongoing HCC surveillance

Early findings

- 6 of 57 patients with discordant results between FIB-4 and FibroScan, among these:
- 4 have at least F3 fibrosis, with FIB4 < 1.45 (ages: 33, 42, 48, 41)

ED HCV Specialty Pharmacy Treatment Model

Live June 2023



- 20 of 60 eligible patients have begun treatment
- Average diagnosis to treatment initiation **15 days**

After 5 Years of Efforts
Many Patients treated >1,500 days
after Diagnosis

ED Specialty Pharmacy
Treatment Team Go-Live

PHASE 3: ED HCV Specialty Pharmacy Test-to-Treat Expansion to KY Dept. of Corrections

Live June 2023

Preliminary screening results

5 county jails: Shelby, Boyle, Three Forks, Harlan, Pike (next: Powell, Marion)

HIV/HCV screening *within 30 days of Parole-*

37 eligible for screening with 97.3% participation/opt-in

HCV Ab+ 27 of 36 (**75%**)

HCV RNA+ 20 of 27 (**74%**)

HIV+ 0 of 36

PHASE 4: ED HCV Specialty Pharmacy Test-to-Treat Expansion to UK Ambulatory

Fall 2023

References

Daniel Moore, J., Galbraith, J., Humphries, R., & Havens, J. R. (2021). Prevalence of Hepatitis C Virus Infection Identified From Nontargeted Screening Among Adult Visitors in an Academic Appalachian Regional Emergency Department. *Open forum infectious diseases*, 8(8), ofab374. <https://doi.org/10.1093/ofid/ofab374>

Van Handel MM, Rose CE, et al. County-level vulnerability assessment for rapid dissemination of HIV or HCV infections among persons who inject drugs, united states. *J Acquir Immune Defic Syndr* 2016;1:323-331