

**Increasing Hepatitis Screening  
in Patients Born from 1945 to 1965  
in a Multi-Site Gastroenterology Clinic**

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# Background of the Problem

- Hepatitis C (HCV) is a blood-borne disease of liver (acute or chronic)
  - Chronic HCV increases liver complications
  - In 2017, 140,000 cases of chronic HCV
  - In 2017, 17,000 deaths related to HCV complications
- HCV screenings provide the benefit necessary to decrease the burden of HCV for individual and population health, as well as the financial cost for healthcare. Chronic HCV increases liver complications.
- The purpose of this project was to improve HCV screening in patients born from 1945 to 1965 within a multi-site gastroenterology (GI) clinic.
- Would use of an HCV algorithm and focused education of providers and staff increase HCV screening in patients born from 1945 to 1965?

# Sample and Setting

- 100 pre-intervention
  - Born from 1945 to 1965
  - Multi site GI clinic seen within 5 weeks of staff educational session
- 65 post-intervention
  - same birth cohort that had been seen during the 4 -week intervention
- Multi-site GI clinic in southern Mississippi
- 1700 patients seen per month in the clinics combined

# Interventions

- Provider and staff education staff meeting
- Informational patient flyer
- Intake-based protocol
- Algorithm

## HCV Intake Based Protocol

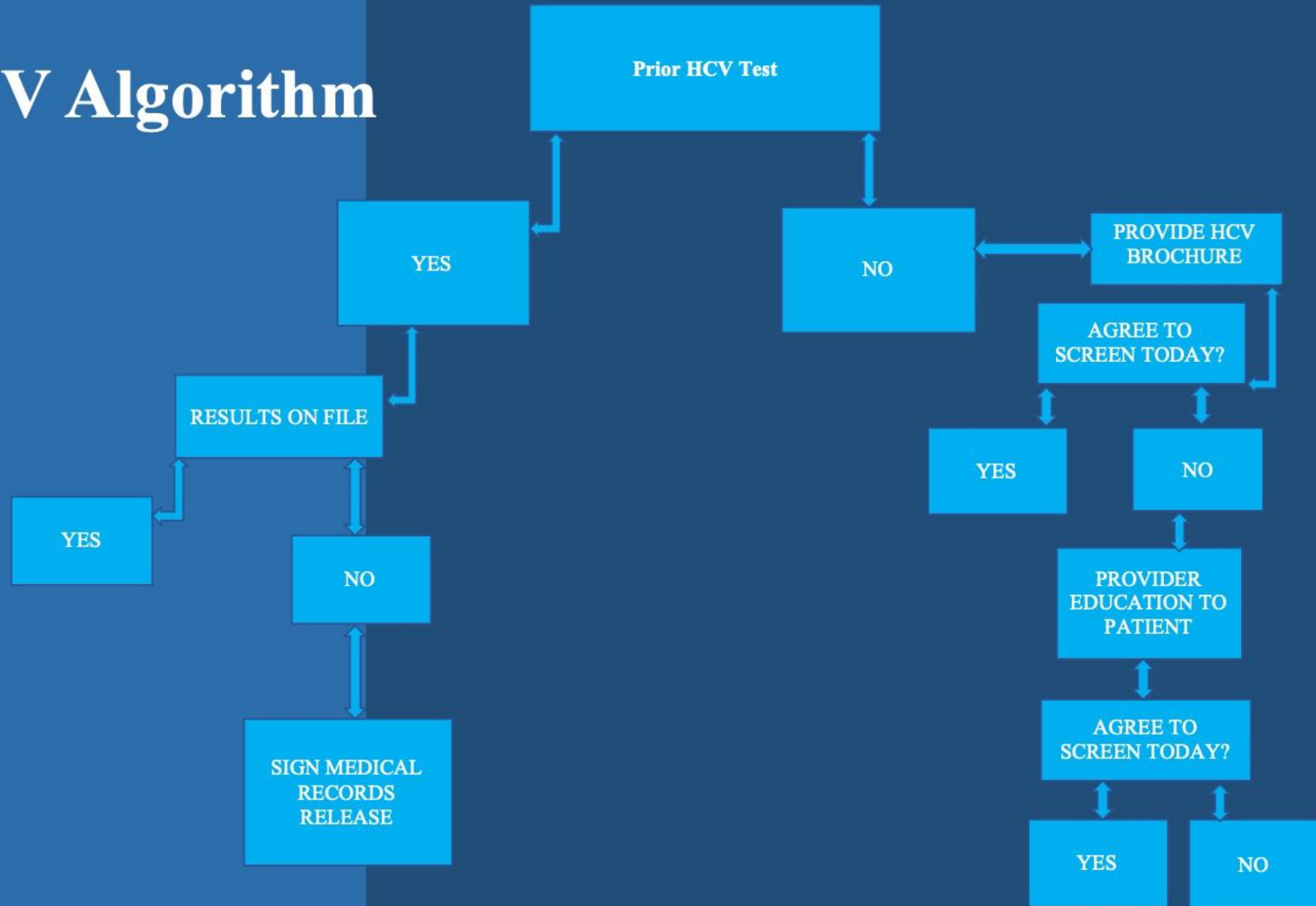
### **HCV Testing Protocol**

Were you born between the years 1945-1965?      YES  NO

Have you previously been screened for hepatitis C?      YES  NO

Would you like to have a hepatitis C screening drawn today?      YES  NO

# HCV Algorithm



# Statistical Results

- Data was converted into a percentage of patients screened compared to the number of patients not screened
- Total of 165 participants, 108 women and 57 men
- Majority of the study participants (n=121) were Caucasian
- Post-intervention previously HCV screened
  - negative HCV tests 72.7%
  - positive HCV test 27.3%
- Post intervention newly HCV screened were 100% negative

# Statistical Results

*Frequencies of Variables for the Pre-and Post-Intervention Samples*

Variables	Pre-Intervention Sample (N = 100)		Post-Intervention Sample (N = 65)	
	n	%	n	%
Gender				
Males	34	34.0	23	35.4
Females	66	66.0	42	64.6
Ethnicity				
African American	28	28.0	14	21.5
Caucasian	71	71.0	50	76.9
Native Hawaiian	1	1	0	
Asian	1	1.5	0	
History alcohol use				
Yes	61	61.0	37	56.9
No	39	39.0	28	43.1
Current alcohol use				
Yes	21	33.9	14	37.8
No	41	66.1	23	62.2
History tobacco use				
Yes	56	56.0	34	52.3
No	44	44.0	31	47.7
Current tobacco use				
Yes	24	42.1	23	67.6
No	33	57.9	11	32.4
History illicit drug				
Yes	55	55.0	28	43.1
No	45	45.0	37	56.9
Current illicit drug				
Yes	3	5.5	1	3.4
No	52	94.5	28	96.6
Hypertension				
Yes	59	59.0	39	60.0
No	41	41.0	26	40.0
Diabetes				
Yes	31	31.0	46	70.8
No	69	69.0	19	29.2

*Frequencies of Variables for the Pre-and Post-Intervention Samples*

Variables	Pre-Intervention (N = 100)		Post-Intervention (N = 65)	
	n	%	n	%
History of HCV Testing				
Yes	35	35.0	11	16.9
No	65	65.0	42	83.1
Family Hx of HCV				
Yes	21	21.0	11	16.9
No	79	79.0	54	83.1
Prior HCV Test Results				
Positive	14	40.0	3	27.3
Negative	21	60.0	8	72.7
HCV Test Ordered				
Yes	10	15.4	54	100.0
No	55	84.6	0	

# Statistical Results

*Frequency and Column Percentages of History of HCV Testing by Sample (N= 165)*

HCV Testing	Pre-intervention		Post-intervention		Total	
	n	%	n	%	n	%
Yes	35	21.2	11	6.7	46	27.9
No	65	39.4	54	32.7	119	72.1
<b>Total</b>	<b>100</b>	<b>60.6</b>	<b>65</b>	<b>39.4</b>	<b>165</b>	<b>100</b>

$\chi^2_{(1)} = 6.402, p < .05$

*Frequency and Column Percentages of New Orders for HCV Testing by Sample (N= 119)*

HCV Testing Ordered	Pre-intervention		Post-intervention		Total	
	n	%	n	%	n	%
Yes	10	8.4	54	45.4	64	55.8
No	55	46.2	0	0	55	46.2
<b>Total</b>	<b>75</b>	<b>54.6</b>	<b>54</b>	<b>45.4</b>	<b>119</b>	<b>100</b>

$\chi^2_{(1)} = 84.96, p < .001$



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? Questions