



# LinkB: A New Approach for Identification and Linkage to Care for People Living with Chronic Hepatitis B

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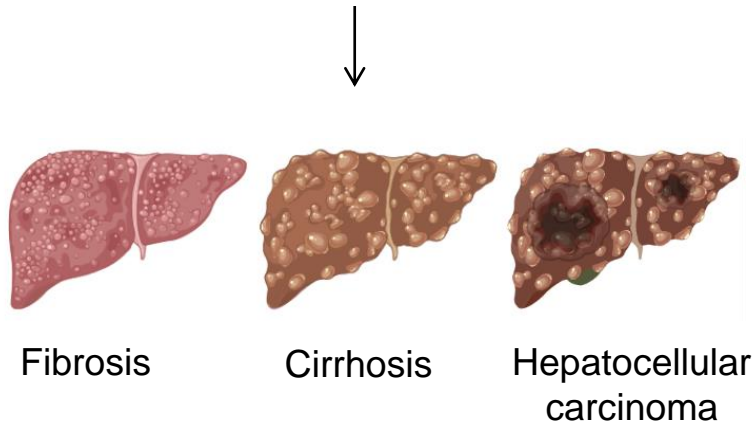


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# Worldwide status of hepatitis B infection

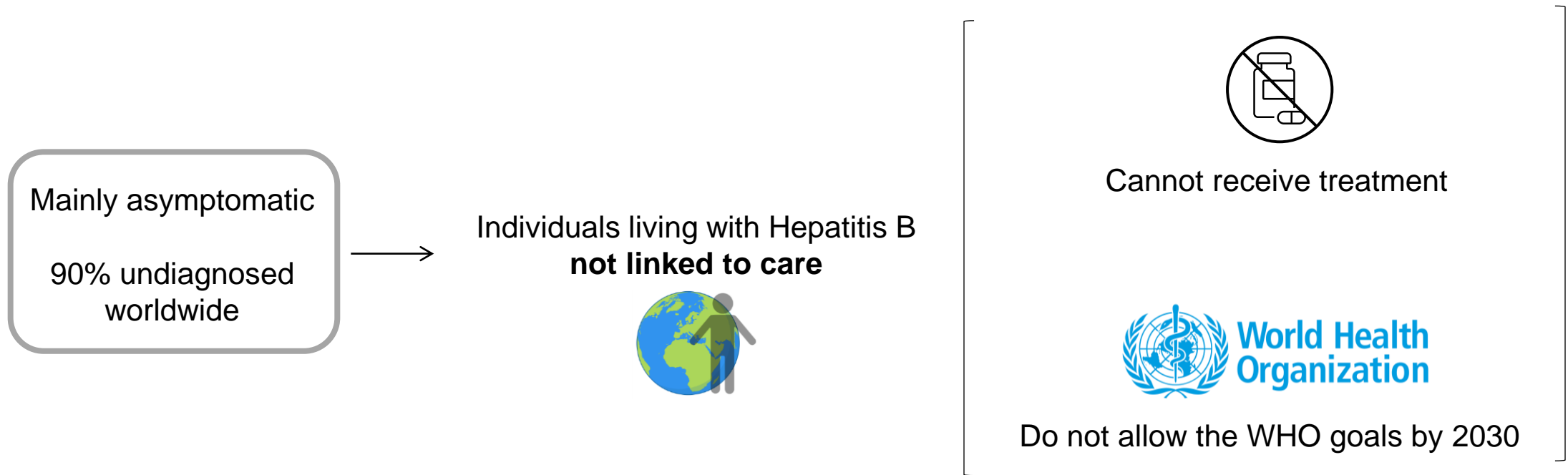
- Hepatitis B Virus (HBV) {
- 296 million people living with hepatitis B
  - HBsAg-positive prevalence of 3.9%



820,000 deaths from HBV-related causes

HBV infection remains related with a high health and economic burden

# Hepatitis B without linkage to care



World Health Organization. (2021). *Global progress report on HIV, viral hepatitis and sexually transmitted infections*.

# LinkB: No hepatitis B without linkage to care

LinkB  
study



Individuals living with Hepatitis B  
**linked to care**



Can receive treatment



World Health  
Organization

WHO goals by 2030

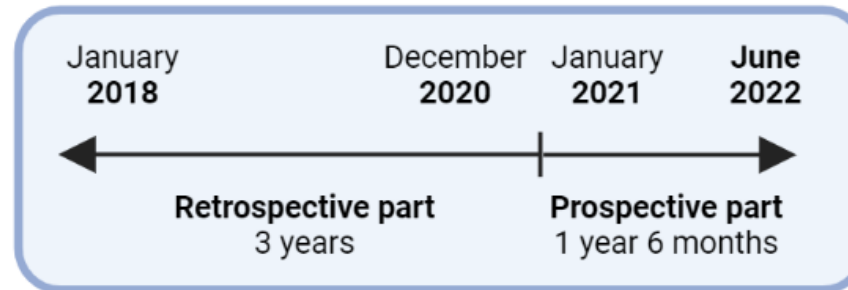
## Aims of LinkB study

- To promote the linkage to the specialist of people with Hepatitis B
- To determine the barriers of linkage to the specialist
- To characterize HBsAg-positive individuals not linked to the specialist

# Study design and methods

- Unicentric  University Hospital (Barcelona, Spain)

- Retrospective-prospective  
Hepatitis B surface antigen (HBsAg)

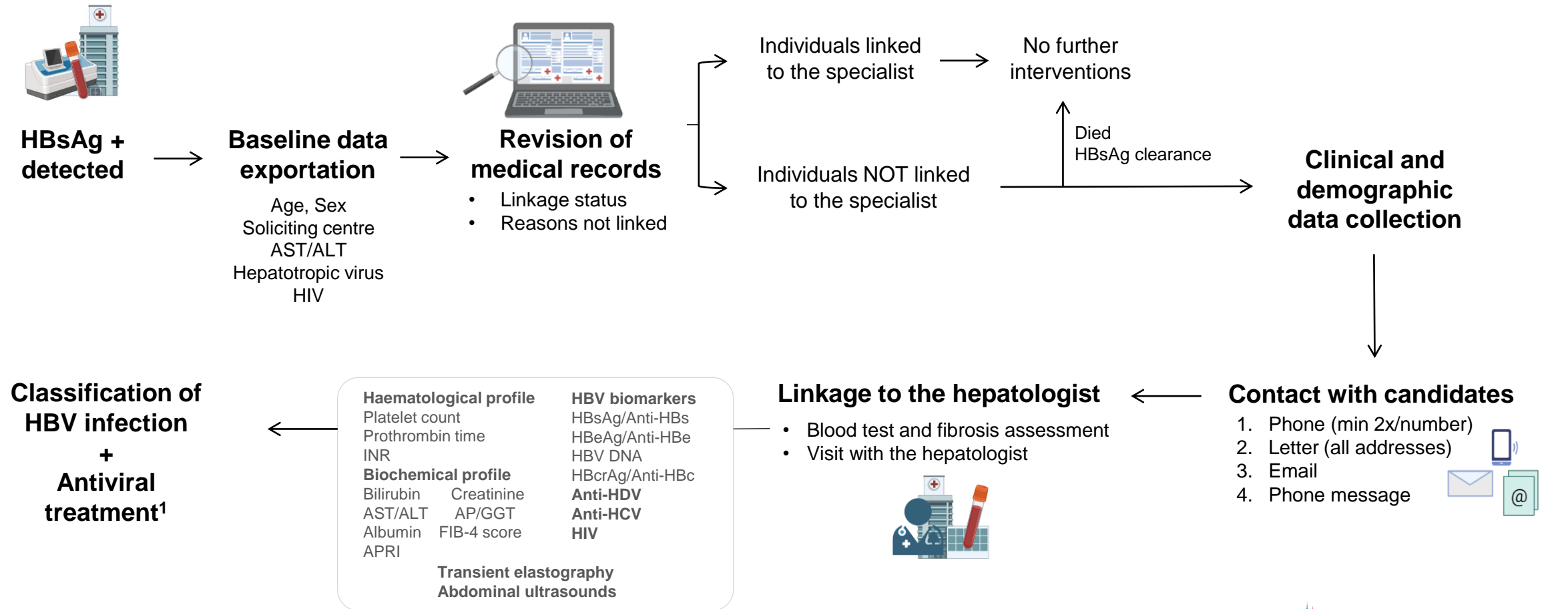


- Microbiologist Department



- Reference laboratory of Barcelona city
- Catchment population of 450,000 inhabitants
- 15 Primary Care Centres + Care and follow-up centres for drug addictions

# Study design and methods

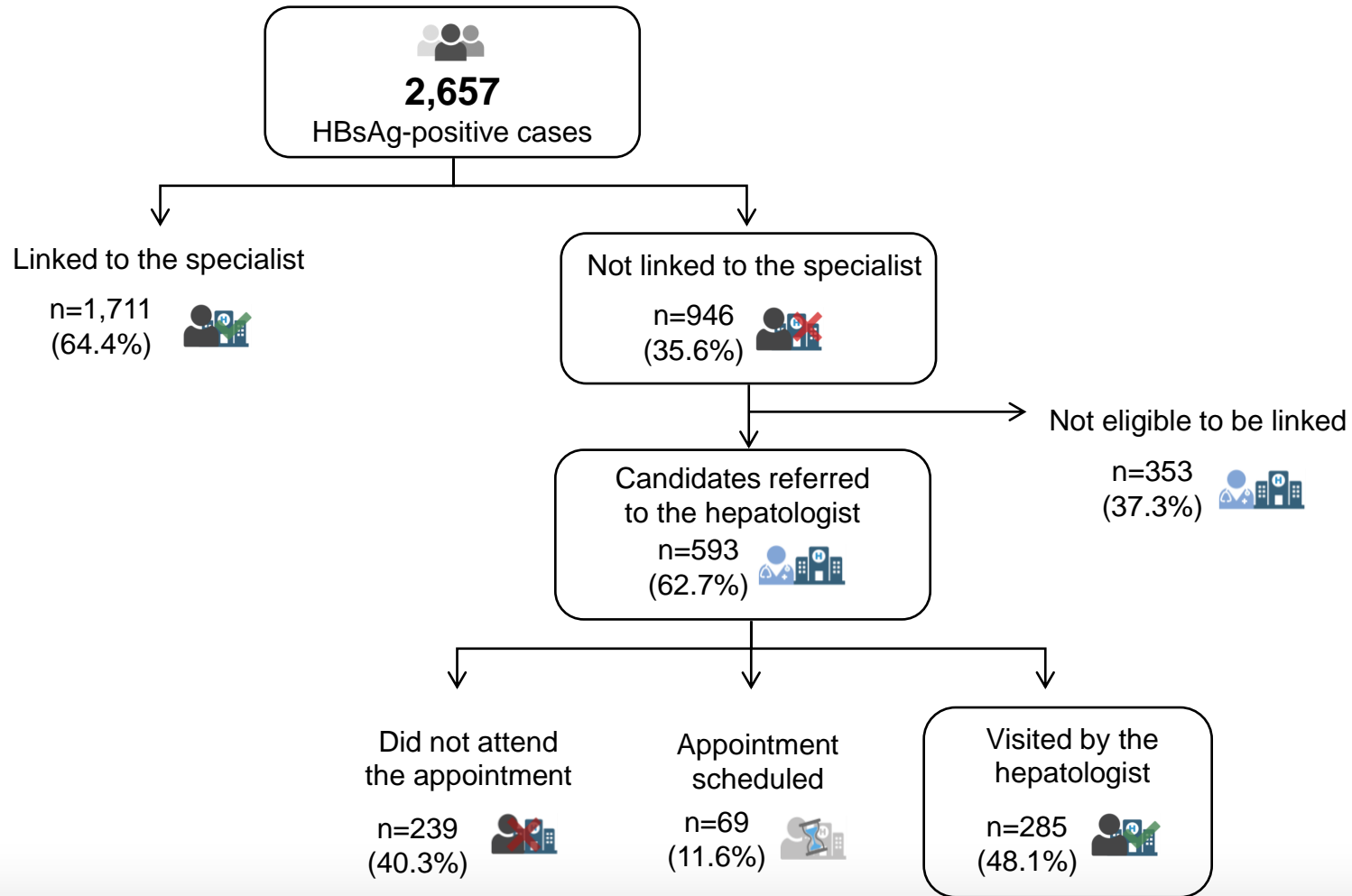


1. EASL 2017 clinical practice guidelines on the management of hepatitis B virus infection. J Hepatol 2017; 67: 370–98.



# Flowchart of HBsAg-positive cases (N=2,657)

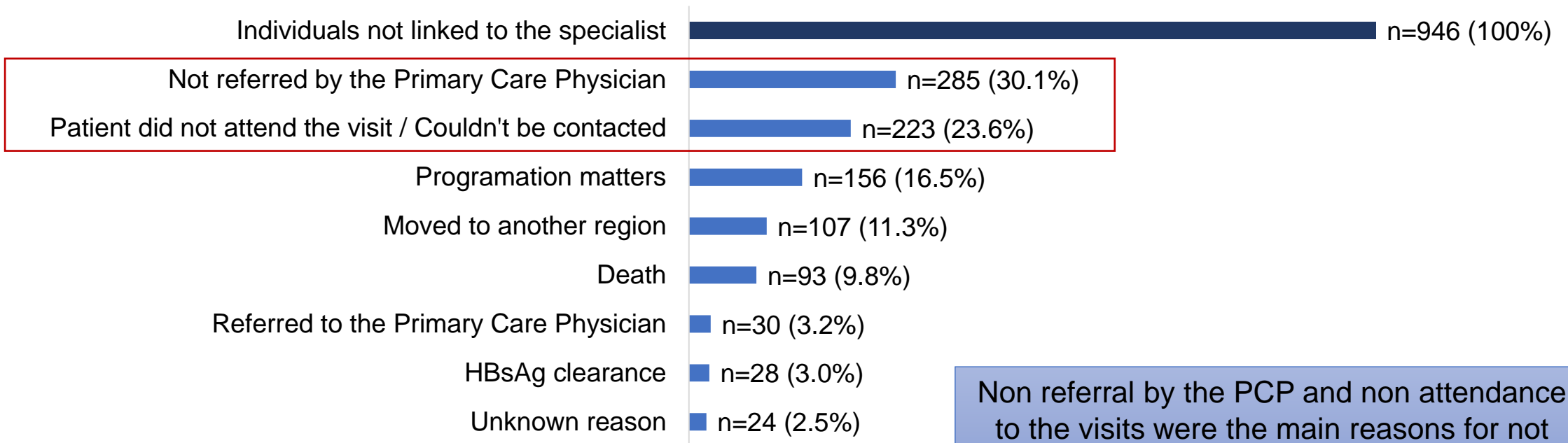
Preliminary results until May 2022





# Reasons for not being linked to the specialist (N=946)

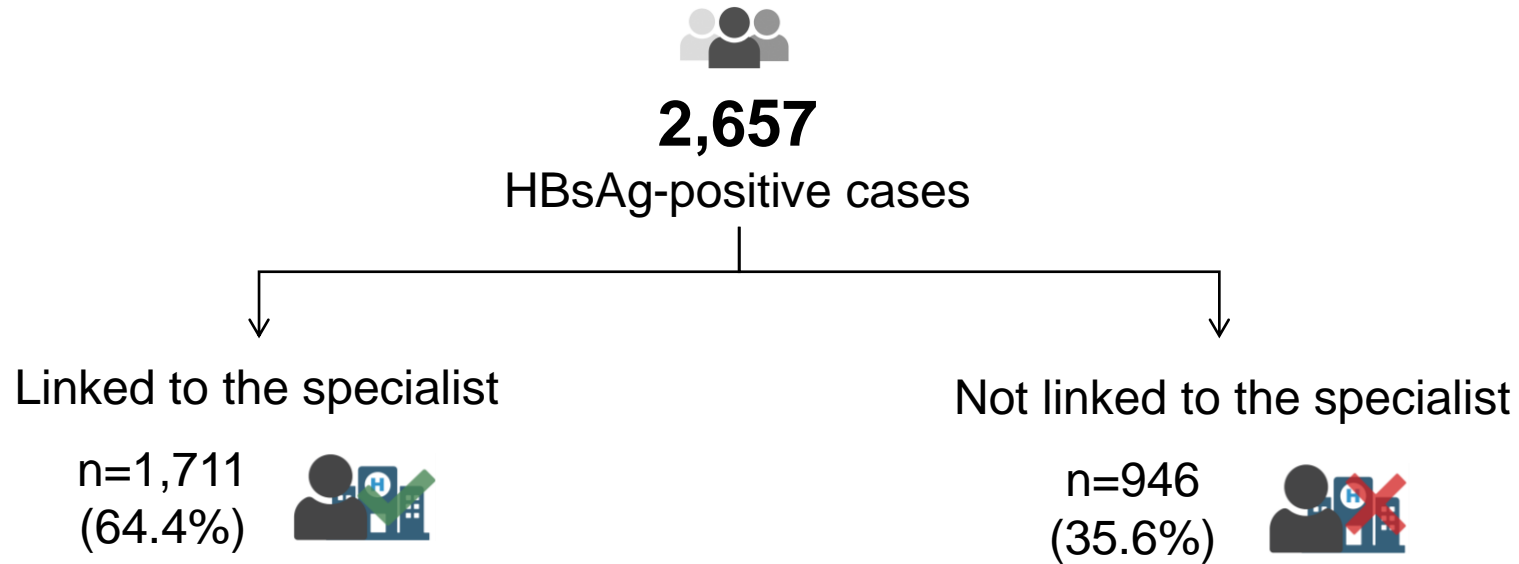
Preliminary results until May 2022



Non referral by the PCP and non attendance to the visits were the main reasons for not being linked to the specialist

# Differences between people linked to the specialist (N=1,711) and those not (N=946)

Preliminary results until May 2022



# Differences between people linked to the specialist (N=1,711) and those not (N=946)

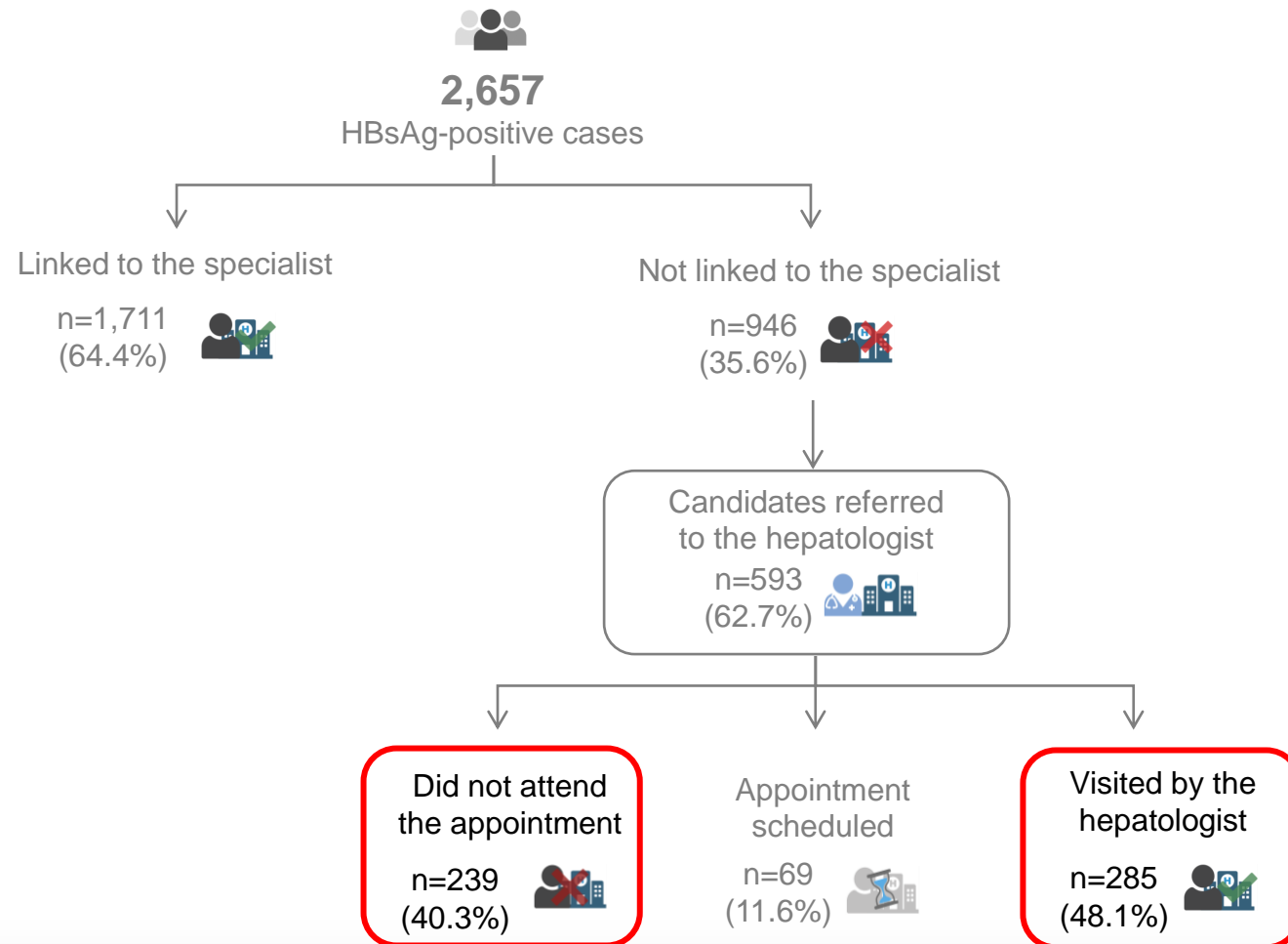
Preliminary results until May 2022

Clinical characteristics	Linked (N=1,711)	Not linked (N= 946)	p-value
<b>Age (years)</b>	<b>49.1 (37.5-60.1)</b>	<b>44.7 (34.3-59.1)</b>	<b>0.000</b>
<b>Male sex</b>	<b>1,050 (61.4%)</b>	<b>625 (66.1%)</b>	<b>0.009</b>
<b>Platelet count (x10E9/L)</b>	<b>228.0±69.5</b>	<b>237.1±76.5</b>	<b>0.003</b>
<b>AST (IU/mL)</b>	27.0 (22.0-35.0)	26.0 (21.8-35.3)	0.905
Elevated AST	194 (13.9%)	93 (14.2%)	0.437
<b>ALT (IU/mL)</b>	25.0 (18.0-37.0)	26.0 (17.0-37.0)	0.538
Elevated ALT	272 (17.1%)	136 (15.9%)	0.234
<b>HBV DNA (logIU/mL)</b>	<b>2.2 (1.2-3.2)</b>	<b>2.4 (1.3-3.3)</b>	<b>0.015</b>
<b>HBsAg (logIU/mL)</b>	<b>3.2 (2.4-3.9)</b>	<b>2.8 (1.3-3.6)</b>	<b>0.000</b>
<b>HBeAg+</b>	<b>164 (12.4%)</b>	<b>56 (7.3%)</b>	<b>0.000</b>
anti-HCV+	45 (4.5%)	22 (3.0%)	0.071
<b>anti-HDV+</b>	<b>59 (12.5%)</b>	<b>8 (4.5%)</b>	<b>0.001</b>
<b>anti-HIV+</b>	<b>17 (2.5%)</b>	<b>4 (0.8%)</b>	<b>0.023</b>

Results are expressed in Md (IQR), n (%), Mean±SD.

## Characteristics of individuals who were visited (N=285) and those who did not attend (N=239)

Preliminary results until May 2022



# Characteristics of individuals who were visited (N=285) and those who did not attend (N=239)

Preliminary results until May 2022

Clinical and demographic characteristics	Visited (N=285)	Did not attend (N=239)	p-value
<b>Ethnia</b>			<b>0.000</b>
Caucasian	<b>104 (39.4%)</b>	<b>42 (28.2%)</b>	
African	<b>47 (17.8%)</b>	<b>61 (40.9%)</b>	
Middle East	36 (13.6%)	27 (18.1%)	
Asian	61 (23.1%)	13 (8.7%)	
Hispanic	16 (6.1%)	6 (4.0%)	
<b>Age (years)</b>	<b>45.9 (36.0-57.5)</b>	<b>40.2 (32.5-48.6)</b>	<b>0.000</b>
<b>Male sex</b>	<b>161 (56.5%)</b>	<b>169 (70.7%)</b>	<b>0.001</b>
<b>Platelet count (x10E9/L)</b>	240.1±61.2	239.1±58.8	0.847
<b>AST (IU/mL)</b>	26.0 (21.0-34.0)	26.0 (22.0-32.0)	0.951
Subjects with increased AST	<b>27 (13.2%)</b>	<b>9 (5.8%)</b>	<b>0.014</b>
<b>ALT (IU/mL)</b>	25.0 (17.0-37.0)	24.0 (17.0-33.0)	0.315
Subjects with increased ALT	<b>38 (14.6%)</b>	<b>18 (8.1%)</b>	<b>0.019</b>
<b>HBV DNA (logIU/mL)</b>	2.6±1.5	2.5±1.4	0.417
<b>HBsAg (logIU/mL)</b>	2.8±1.3	2.9±1.1	0.632
<b>HBeAg+</b>	12 (5.1%)	8 (4.0%)	0.382
<b>anti-HCV+</b>	5 (2.3%)	9 (4.7%)	0.143
<b>anti-HDV+</b>	4 (6.9%)	1 (2.6%)	0.328

Results are expressed in Md (IQR), n (%), Mean±SD.

# Conclusions

1. More than one-third of recorded HBsAg-positive cases were not linked to the specialist.
2. The main reasons for no linkage to care were non-referral by the Primary Care Physician and non-attendance of patients to the visits.
3. Individuals not able to be linked were mainly middle-aged African male.
4. LinkB is retrieving more than one third of HBsAg-positive individuals that were not linked.



Thank you for your attention

**LinkB: A New Approach for Identification and Linkage to Care for People Living with Chronic Hepatitis B**

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