Variance Between Clinicians and Guidelines in the Management of HIV/HCV Infection

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SCAN ME

1. Background

- Simultaneous treatment for both HIV and HCV infection requires consideration of multiple factors beyond drug interactions
- In May 2018, we developed an online decision support tool based on recommendations from the AASLD/IDSA and DHHS guidelines for HIV/HCV patient scenarios

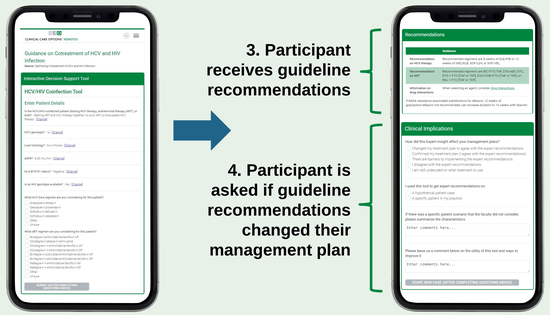
2. Methods

- Guidelines were applied to first-line management recommendations for 304 unique HIV/HCV coinfection case scenarios based on a simplified set of patient variables:
  - Current ART/HCV therapy
  - HIV and HCV genotypes
  - Liver histology
  - Renal function
  - HLA-B*5701 status
- Next, we developed an online decision support tool that enabled users to define a patient scenario using these variables and then see recommendations for that specific case. Users' treatment intentions were captured before and after recommendations were displayed

Online Decision Support Tool Provides Patient-Specific Recommendations From HIV and HCV Guidelines

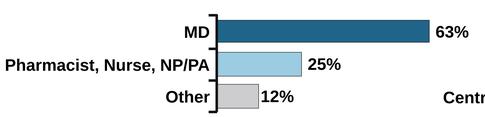
SCAN TO OPEN TOOL

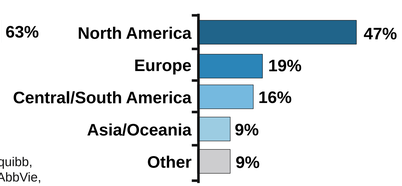
1. Participant enters patient and disease factors
2. Participant indicates management plan
3. Participant receives guideline recommendations
4. Participant is asked if guideline recommendations changed their management plan



3. Participant Demographics

- From August 2018 through August 2019, N = 683 participants (61% ID or HIV specialists) entered **972** patient case scenarios





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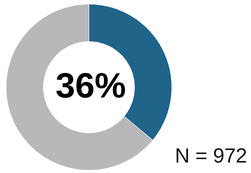
4. Comparison of First-line Management Choices by Patient Scenario

All Cases in Which Users' Baseline Treatment Intentions Inconsistent With Guidelines



Patient Characteristics

Case	Treatment Inconsistent With Guidelines	Participants Choosing Treatment Inconsistent With Guidelines
eGFR < 60 mL/min	TDF alone, or with SOF/LDV or SOF/VEL	41% (N = 158)
HLA-B*5701 Positive	DTG/ABC/3TC	6% (N = 53)

Drug Interactions

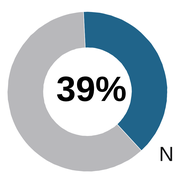
Case	Treatment Inconsistent With Guidelines	Participants Choosing Treatment Inconsistent With Guidelines
Receiving EVG/COBI	GRZ/ELB	14% (N = 147)
Receiving GRZ/ELB	EVG/COBI	11% (N = 27)
Receiving SOF/LDV	EVG/COBI/ 3TC/TDF	6% (N = 69)

HIV or HCV Genotype

Case	Treatment Inconsistent With Guidelines	Participants Choosing Treatment Inconsistent With Guidelines
HIV Genotype Unavailable	EVG or RAL	20% (N = 152)
HCV Genotype 2, 3	SOF/LDV	16% (N = 212)
HCV Genotype 2, 3, 5, 6	GRZ/ELB	7% (N = 226)

5. Intent to Change Among Participants Differing From Guidelines

Did Not Change Plan Owing to Barriers, Disagreement With Guidelines, Unsure (61%)



Changed Plan to Match Guidelines (39%)

"Excellent simple review and confirmation of my choice"

"This tool could be a help when we don't have all the regimens available in our setting"

6. Conclusions

- This online decision support tool showed that clinicians' initial treatment plans for HIV/HCV coinfection **differed from HIV and HCV guidelines** for 36% of case scenarios
- Scenarios where clinicians' treatment plan was inconsistent with guidelines were:
  - SOF or TDF in patients with eGFR < 60 mL/min
  - DAAs and ART with drug–drug interactions
  - SOF/LDV or GRZ/ELB in unapproved HCV genotypes
  - EVG or RAL without knowing HIV genotype, or ABC in HLA-B*5701-positive patients
- Using an online tool **changed the intended treatment plan for many participants,** suggesting the tool's use can help optimize care of patients with HIV/HCV coinfection

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