

# Public Health Impact of Antiviral Therapy in the US

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# Premise

- Antiviral therapies are improving, but to do any good they have to get to the patient

# Outline

- 1) What is the public health impact of current antiviral therapy?
- 2) What are the barriers to treatment?
- 3) How can those barriers be eliminated?

# 1) Public health impact of antiviral therapy

# Our 2009 analysis

- New PEG-IFN prescription data were obtained from a market research firm for 2002-2007
- Markov model of the US HCV population
  - Proportion of liver-related deaths averted by antiviral therapy

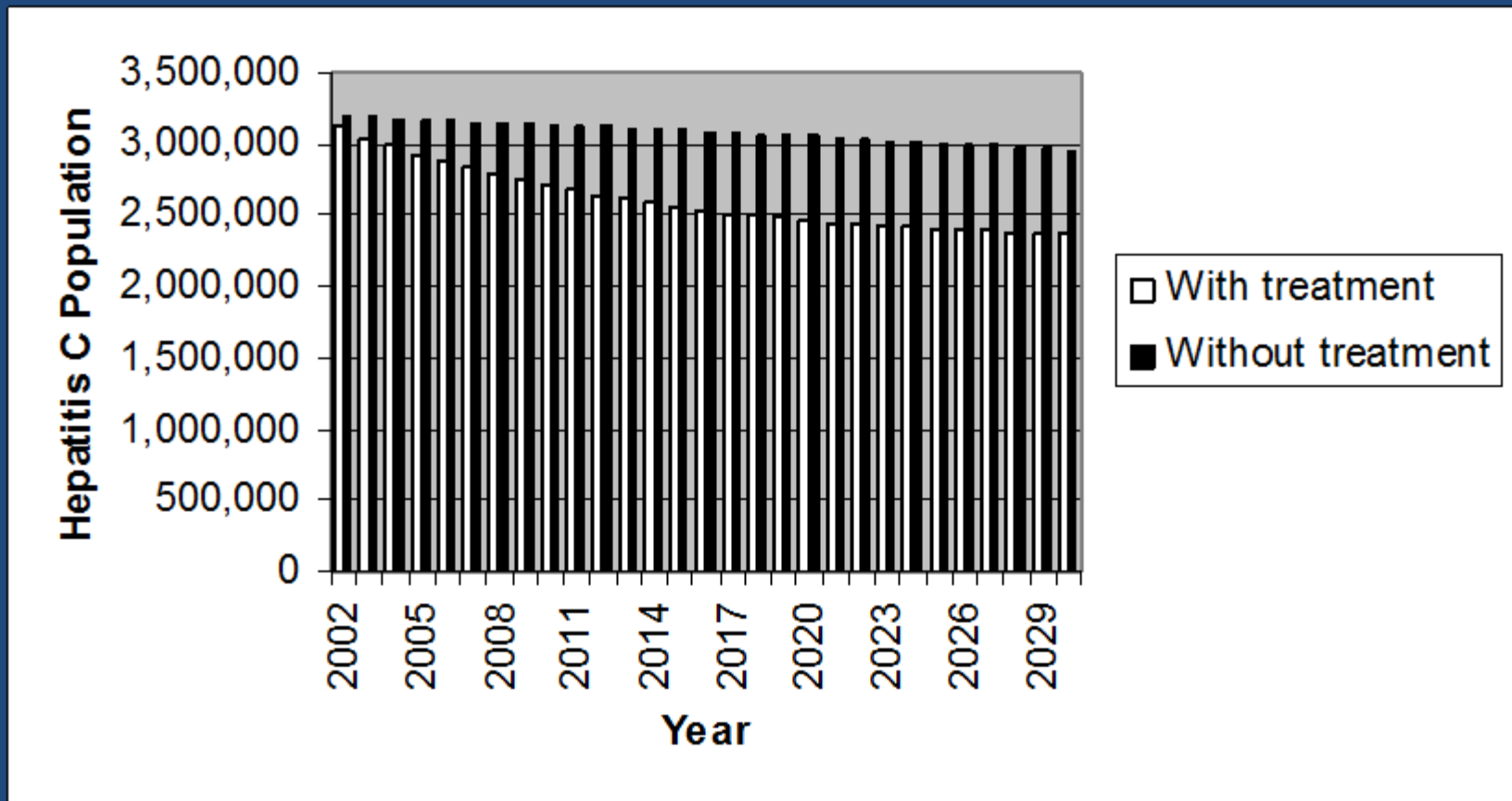
Volk et al. Hepatology 2009;50:1750

# New PEG-IFN Rx

Year	# new prescriptions	95% CI
2002	126,040	125,449–126,649
2003	144,275	143,616–144,943
2004	107,131	106,653–107,614
2005	114,197	113,580–114,823
2006	88,083	87,685–88,486
2007	83,270	82,897–83,647

- Approximately 5% of the HCV population being treated each year

# Results from the Markov model



# Markov results (cont)

- Between 2009 and 2030, an estimated 14.5% of liver-related deaths in the HCV population averted by antiviral therapy
- Sensitivity analysis:
  - Increasing SVR to 75%: 21% of deaths averted
  - Increasing patients treated by 50%: 30% of deaths averted

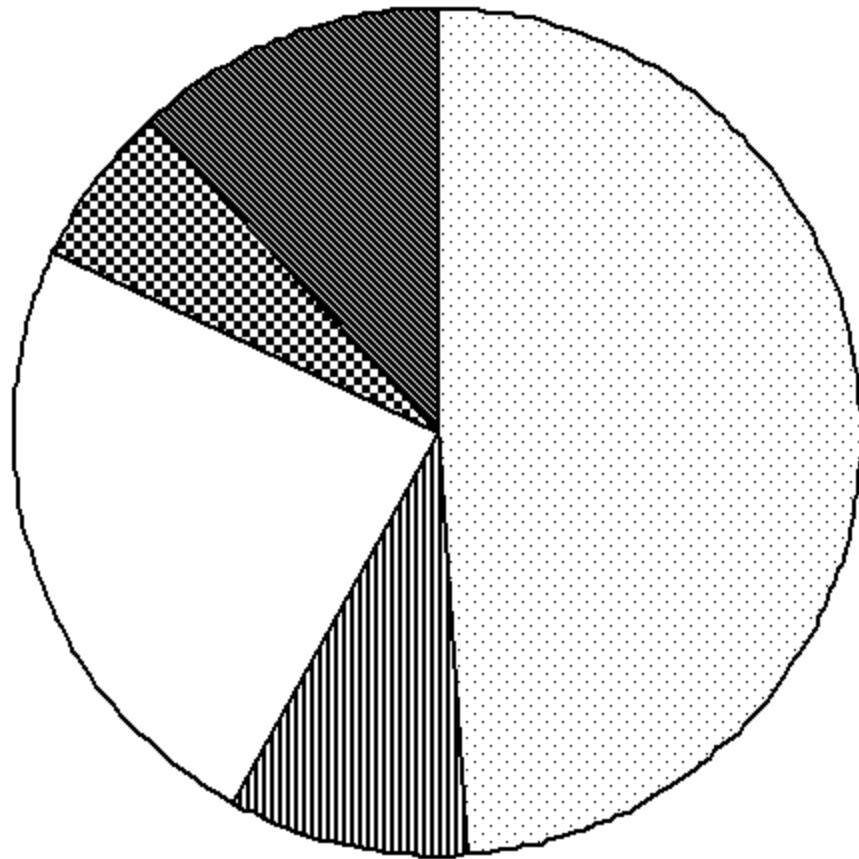


## 2) Barriers to treatment

# The test and treat process

- Diagnosis
  - Identification of those at risk, order test, patient gets test, follow-up
- Referral to specialist
  - Access to specialists willing to treat
- Doctor recommends treatment
  - Patient medical and psychosocial comorbidities
- Patient takes treatment
  - Willingness, insurance, side effects
- SVR
  - Efficacy of medication, appropriate management on treatment

# NHANES f/u survey: reasons for lack of treatment



- Unaware
- ▨ Didn't see doctor
- No treatment recommended
- ▩ Patient refused
- ▤ Treated

3) How can barriers be eliminated

# Eliminating barriers in the DAA era

- Patient
  - Public education campaigns (general or targeted)
  - Public screening campaigns
- Healthcare system
  - Who treats HCV?
- Medication
  - Complexity of tailored therapy

# Discussion