All analyses were performed using Stata 

regression was used to study the second objective.

Trends were plotted and analyzed. Weighted logistic 
glaucoma medication was prescribed during the visit. 
glaucoma was reported as the reason of visit, and if any
ICD-9 diagnosis codes for glaucoma were reported, if
Office visits were considered to be glaucoma related, if
included.
glaucoma in US outpatient settings in this period were
- Patients aged ≥18 years who received treatment for
glaucoma in US outpatient settings in this period were
included.

Treatment for Glaucoma
- Treatment for glaucoma is usually focused on
intraocular pressure (IOP) reduction with medications, as
this is believed to prevent or arrest deterioration of the
optic nerve and visual fields by reducing aqueous humor
production or increasing aqueous outflow.
- In recent years, although topical beta-blockers have
remained the mainstay for treatment of open-angle
glaucoma, other medications have emerged that have the
ability to reduce IOP and also offer the added advantage
of improved therapeutic index.

Study Objectives
- To examine the trend in prescribing patterns of
topical glaucoma medications.
- To determine factors related to patients as well as
physicians associated with the prescribing patterns of
prostaglandin inhibitors

Methodology
- A retrospective cross sectional study was performed
using the National Ambulatory Medical Care Survey
- Patients aged ≥18 years who received treatment for
glaucoma in US outpatient settings in this period were
included.
- Office visits were considered to be glaucoma related, if
ICD-9 diagnosis codes for glaucoma were reported, if
glaucoma was reported as the reason of visit, and if any
glaucoma medication was prescribed during the visit.
- Trends were plotted and analyzed. Weighted logistic
regression was used to study the second objective.
- All analyses were performed using Stata \textsuperscript{\textregistered} Version 9.0.

Results
- The number of prescriptions for prostaglandin analogs increased
over the 5 year period (1.7 million in 1999 to 2.2 million in 2003).
- The number of prescriptions for beta-blockers decreased by
approximately 47% from 1999 to 2003 (1.9 million to 1 million).
- There was no significant difference in number of prescriptions
for alpha-2 agonists over the 5 year period (0.9 million to 0.8
million).
- The number of prescriptions for carbonic anhydrase inhibitors
decreased by almost 53% from 1999-2003 (0.8 million to 0.3
million).
- Weighted logistic regression indicated no significant association
between prescriptions for prostaglandins and patients' sociodemographic characteristics including age, gender, race, and source of payment.
- Ophthalmologists had a higher odds of prescribing prostaglandins
as compared to non-ophthalmologists (OR: 11.05; 95% CI: 2.38-51.36).

Limitations
- This study used NAMCS which is cross-sectional. Analyzing
prescribing trends using longitudinal data may be required.

Conclusions
- In the nationally representative sample of glaucoma patients,
increasing trend was found in the number of prescriptions for
prostaglandins.
- With respect to overall national utilization patterns of glaucoma
medications, prostaglandins had the highest number of prescriptions
over the four years.
- Superior clinical effects, improved therapeutic index, safety,
efficacy, and ease and convenience of administration with
prostaglandin analogs may be contributing to the higher number of
prescriptions.

Future Research
- Economic models are required to examine the impact of
increased utilization of prostaglandins in Glaucoma patients.
- Comparing patients' compliance and satisfaction with
different topical glaucoma medications would assist in
understanding different utilization patterns of these medications.