

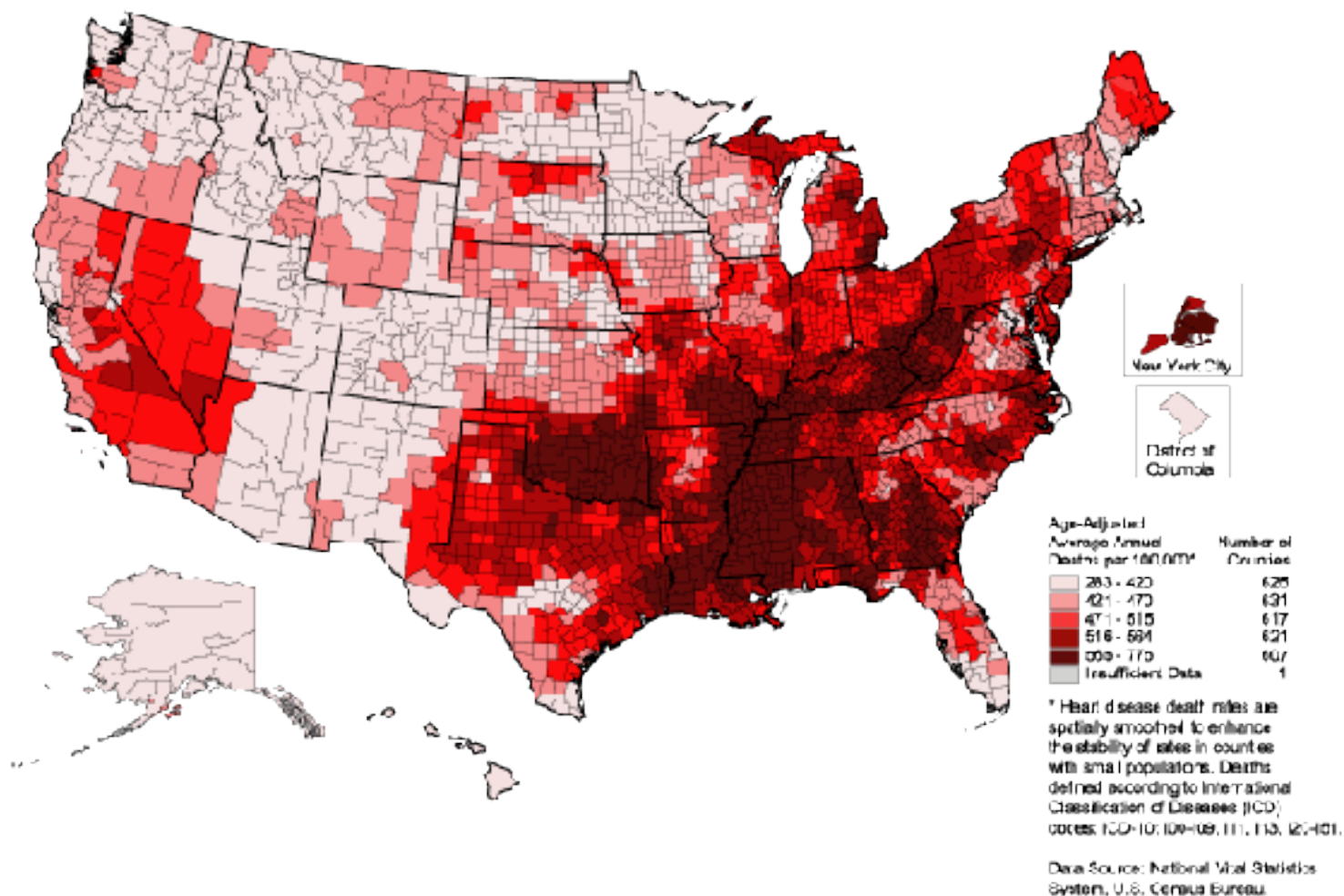
# ASPIRIN THERAPY AWARENESS IN STEPHENS COUNTY

Craig Quattlebaum, James Mold, M.D., M.P.H.,  
Eric Schinnerer, Kent King, M.D.

# The problem....

- Cardiovascular disease accounts for 39% of deaths in Oklahoma.
- That translates to 13,326 deaths per year resulting from cardiovascular disease.
- This contributes to Oklahoma's ranking as the 4th unhealthiest state.

# CV disease related deaths



CDC 2004

# Effects of Prophylactic Aspirin

- Among a wide range of patients low-dose aspirin typically prevents at least 10 to 20 fatal and nonfatal vascular events for every 1000 patients treated for one year
- In high risk patients, long term therapy doubles the risk of upper gastrointestinal bleeding.
- In middle aged patients this corresponds to an excess of approximately 1 to 2 major bleeding complications per 1000 patients treated for one year
- The increase for hemorrhagic strokes is 1 to 2 in 10 000

# Purpose of the Present Study

- Design and implement a community-based initiative to increase appropriate low-dose aspirin use in patients at higher than average risk for cardiovascular events.
- Based upon the Stephen's County experience and results, develop an effective protocol for initiating increased use of prophylactic low-dose aspirin throughout Oklahoma.

# Methods

Three phase contract:

- Design intervention (3 months): August 10 – October 10, 2008
- OSDH Review and suggestions
- Implement intervention (6 months): November 10, 2008 – April 10, 2009
- Report results and lessons learned (3 months): April 10 – June 10, 2009

Note: Project implementation actually occurred January - June, 2009. Analyses and report postponed until July 31, 2009

# Methods continued

- January of 2009- educational posters and pamphlets distributed to physicians (18 in 11 practices) in Duncan, Marlow, and Commanche. Physicians encouraged to counsel their at-risk patients about low-dose aspirin and document encounters to qualify for \$25 incentive.
- All 11 pharmacies in the area were provided with the materials and encouragement to counsel patients about low-dose aspirin, as well as the incentive for documentation.
- Posters were displayed in Duncan regional Hospital and an electronic message board featured the poster's content.
- 33 Churches in the area were encouraged to display educational posters.
- June 2009- 2 billboards about the aspirin campaign were erected in Stephens county.

# Methods continued

- Newspaper ads in the local Duncan and Marlow papers in early June.
- A public broadcast television “slide type” advertisement also ran.

Note: Plans underway to implement further intervention to possibly include:

- ▣ a real time television commercial
- ▣ distribution of materials at assisted living center
- ▣ distribution of educational materials through the major employers of Stephens county.

# Methods-measurement

- A semi-structured survey of physicians and pharmacists
- A summary of the various forms of community-wide advertising used and estimated numbers of people reached by each method.
- Data from the local Wal-Mart on sales of low-dose (81mg) aspirin in the area (Jan – Dec., 2008 vs. Jan-June, 2009).
- Number of admissions for MI, ischemic stroke and GI bleeds (Jan. – Dec., 2008 vs. Jan. - June, 2009).

# Results- Advertising Exposure

Population of Stephens County: 43,182

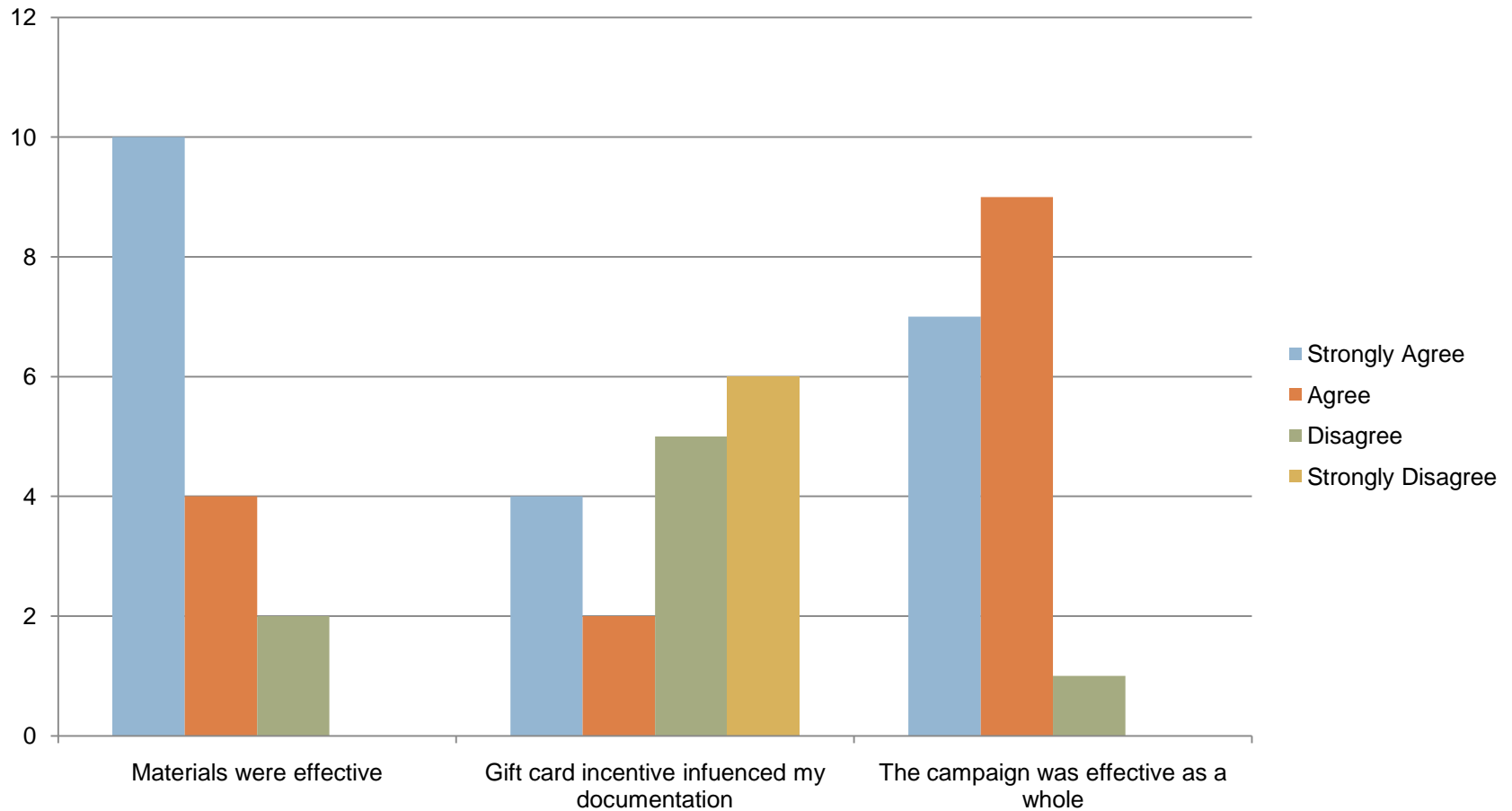
- “The Duncan Banner” - 7000 subscribers.
- “The Marlow Review” - 3000 subscribers.
- The two billboards - 4950 cars per day.
- Church attendance- 5460 per week
- There was no accurate estimate available of the number of people exposed to the radio or cable advertisements.

# Results- Health Professional Surveys

## Estimated Aspirin Counseling

	Pre-Study	Study	% Change
<b>% of Patients Counseled</b>	35.50%	48.20%	35.7%
<b>% of Patients who Initiated Counseling</b>	15.40%	25.60%	66.20%

# Results- Health Professional Surveys



# Results- Health Professional Surveys

**In what ways would you improve the materials (this could include adding or eliminating certain materials) for future projects?**

- “Be sure to include that talking to your doctor is necessary before beginning aspirin therapy. A ‘shelf talker’ at the end of aisles in the pharmacy would be helpful.”
- “A brochure would be good, probably better than a bookmark. A question hotline or website that patients could access would be a huge help.”
- “The information could be delivered as coupons attached to the medication at the pharmacy.”
- “Provide some kind of display for the pamphlets; showcase them more.”

# Results- Health Professional Surveys

## **How could the documentation of patient counseling be improved for future studies?**

- “Provide more space for documentation on the forms.”
- “The form should be simplified. A check box system would be best.”
- “Give the patient a card to fill out. This could be mailed in or left in a box at the pharmacy.”
- “Have the patient fill out a survey.”
- “Patient fills out the survey while in the office.”
- “A reminder for the Pharmacist.”
- “Give patient a toll free number to call and report aspirin counseling.”
- “Require less questions.”
- “Provide an online questionnaire with boxes to check.”

# Results- Health Professional Surveys

## **Do you have any suggestions for the implementation of future projects?**

- “Work with Bayer to provide free baby aspirin samples. Make documentation less cumbersome.”
- Pharmacist expressed concerns about patients informing physicians and educating patients on correct dosage.
- “More general media advertisements”
- “Face to face promotion at public events. Set up booths etc.”
- “The pharmacy is a great avenue for education. A volunteer powered support phone line would be beneficial.”
- “Target interventions to the at-risk profile: assisted living centers, senior citizens’ centers, etc.”
- “Get samples from Bayer; provide to the patients upon counseling.”

# Results- Wal-Mart sales

## 81 MG

<b>Avg. Per Month</b>	<b>Pre</b>	<b>Study</b>	<b>% Change</b>
Sales	459.4	539.3	17.40%
Pills	63,354	70,145	10.70%

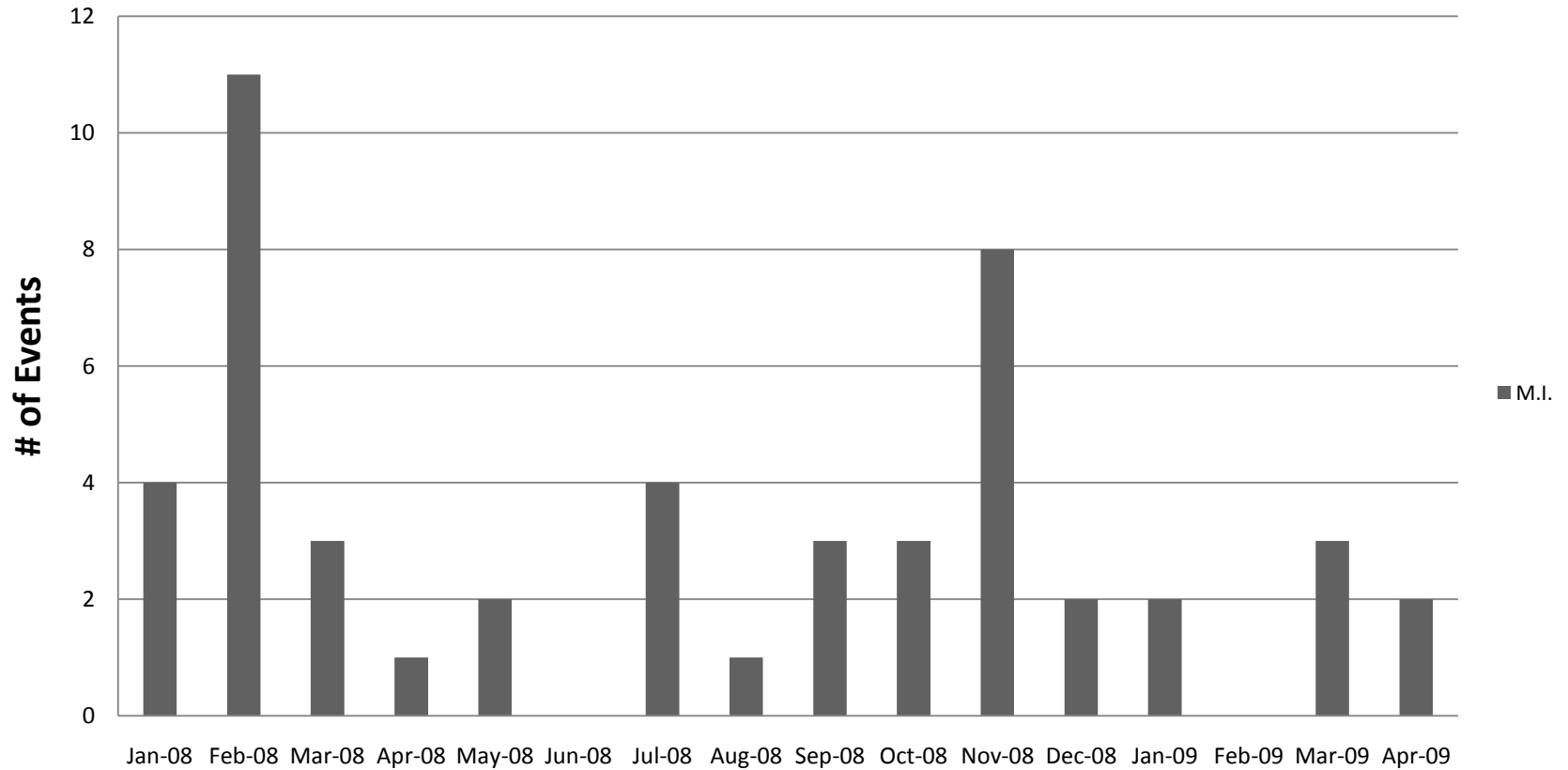
# Results- Wal-Mart sales

## 325 MG

<b>Avg. Per Month</b>	<b>Pre</b>	<b>Study</b>	<b>% Change</b>
Sales	139	172.3	23.70%
Pills	17,179	23,325	35.70%

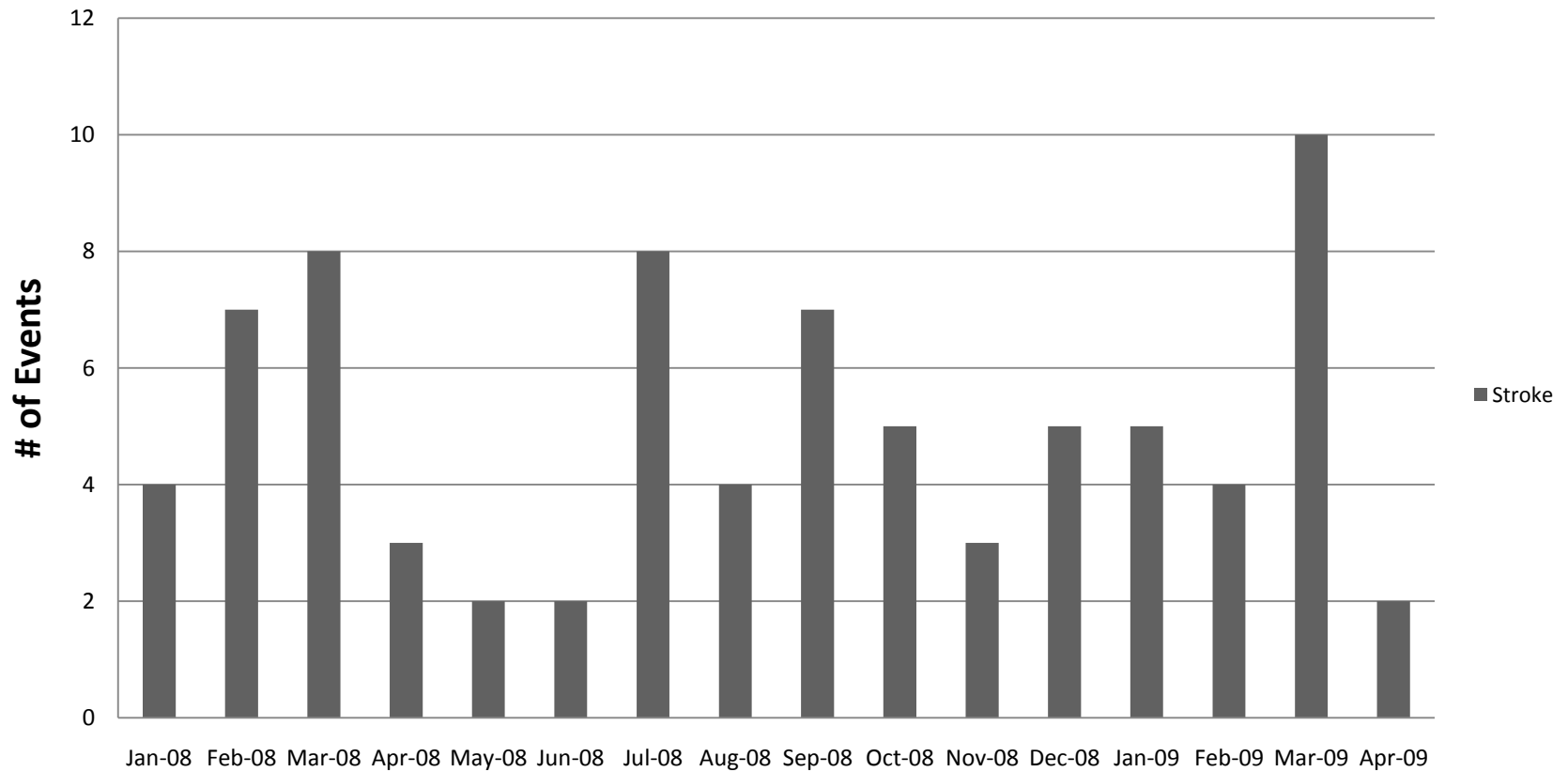
# Results- Duncan Regional Hospital

## M.I.



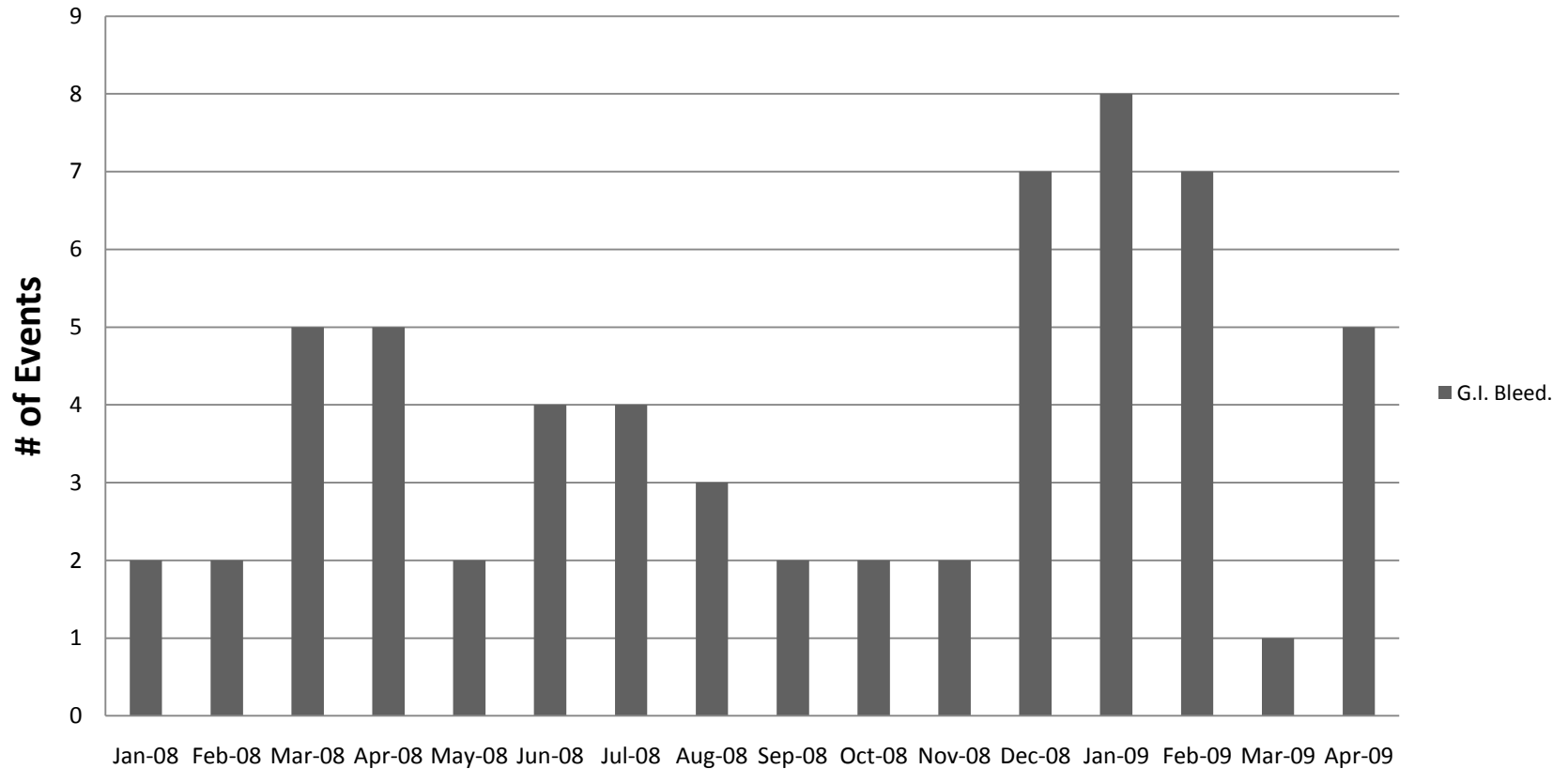
# Results- Duncan Regional Hospital

## Stroke



# Results- Duncan Regional Hospital

## G.I. Bleed.



# Results- Duncan Regional Hospital

<b>Event</b>	<b>Pre-Study Avg. Per Month</b>	<b>Study Avg. Per Month</b>	<b>% Change</b>
<b>M. I.</b>	3.5	1.75	(-)50%
<b>Stroke</b>	4.8	5.25	(+)9.4%
<b>G.I. Bleed</b>	3.25	5.25	(+)61.5%

# Lessons

- It is possible to organize and implement a county-wide low-dose aspirin campaign for \$18,000 over a one-year period.
- It probably requires a local influential advocate with clinical credibility (e.g. primary care clinician) and at least one project coordinator with good interpersonal skills.
- Input during the planning phase from community-based researchers (OSDH, OUHSC) was important.
- Educational materials should emphasize low-dose (81mg) aspirin.
- Incentivizing providers based upon documentation of encounters wasn't effective

# Conclusions

- It should be possible to spread this program to other counties, but the OSDH would need to partner with a local clinician or respected health advocate. Dr. Mold through the OKPRN network or Neil Hahn through the Turning Point Network may be able to help.
- Educational materials need to be enhanced to emphasize low-dose aspirin rather than regular analgesic-dose aspirin.
- The cost of a statewide, county-based initiative would be around \$1,000,000.