Models for Establishing Academic Detailing Programs to Increase Evidence-Based Prescribing

The Pennsylvania PACE Program and the Academic Detailing Experience

THE NATIONAL COMPARATIVE EFFECTIVENESS SUMMIT

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Pharmaceutical Assistance Contract for the Elderly
The PACE Program

- Began in July 1984 to provide Pennsylvania seniors with comprehensive Rx coverage
- Persons served, FY 2010/11 – 343,400
- Funded by Pennsylvania lottery and tobacco settlement
The PACE Program in CY 2010

- Total pharmacy benefit: $733.7 M
- Cardholder share: $92.5 M; 12.6%
- State share: $297.3 M; 40.6%
- Third party coverage: $343.5 M; 46.8%
  (Medicare Part D, employer and union sponsored coverage)
- 81% of enrollees have Medicare Part D
Eligibility

PACE and PACENET

- 65 years of age or older
- Resident of PA for at least 90 days
- No asset test
2011 PACE Income Limits

PACE
- Single applicant: $14,500
- Married couple: $17,700

PACENET
- Single applicant: $14,500 - $23,500
- Married couple: $17,700 - $31,500
Benefits for Cardholders *Enrolled* and *Not Enrolled* in Medicare Part D PACE Partner Plans, 2011

Comprehensive Rx coverage:
- First $ coverage
- Open formulary
- Open pharmacy network
- Low copays
- Program pays Part D premiums if enrolled in Part D
Premiums and Copays for Cardholders Enrolled in Medicare Part D PACE Partner Plans, 2011

**PACE Plus**
- PACE pays Part D premium
- $6 Copay, Generic Rx
- $9 Copay, Brand Rx

**PACENET Plus**
- PACENET pays Part D premium and collects premium at pharmacy
- $8 Copay, Generic Rx
- $15 Copay, Brand Rx
Premiums and Copays for Cardholders
Not Enrolled in Medicare Part D
PACE Partner Plans, 2011

<table>
<thead>
<tr>
<th>PACE</th>
<th>PACENET</th>
</tr>
</thead>
<tbody>
<tr>
<td>No program premium</td>
<td>$34.07 monthly, cumulative premium</td>
</tr>
<tr>
<td>$6 Copay, Generic Rx</td>
<td>$8 Copay, Generic Rx</td>
</tr>
<tr>
<td>$9 Copay, Brand Rx</td>
<td>$15 Copay, Brand Rx</td>
</tr>
</tbody>
</table>
July 2011 Persons Served

- PACE       120,100
- PACENET    184,100
- Total      304,200
## Typical Enrollee

<table>
<thead>
<tr>
<th></th>
<th>PACE</th>
<th>PACENET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age</td>
<td>79 yrs.</td>
<td>78 yrs.</td>
</tr>
<tr>
<td>% female</td>
<td>81%</td>
<td>67%</td>
</tr>
<tr>
<td>Married</td>
<td>9.4%</td>
<td>38.9%</td>
</tr>
<tr>
<td>Average income</td>
<td>$11,800</td>
<td>$21,400</td>
</tr>
<tr>
<td>Own home</td>
<td>54.5%</td>
<td>69.7%</td>
</tr>
<tr>
<td>Rx per enrollee</td>
<td>37.8</td>
<td>34.9</td>
</tr>
<tr>
<td>Therapeutic classes</td>
<td>5.6</td>
<td>5.4</td>
</tr>
</tbody>
</table>

Nearly 40% of survey respondents indicated they did not complete high school.
Enrollment Assistance

- Local pharmacies
- Legislative district offices
- Senior centers
- PA Department of Aging website
  - PACEcares.magellanhealth.com
  - aging.state.pa.us
- PACE call center  1-800-225-7223
- Outreach by Benefits Data Trust  1-866-712-2060
- Residency, age and income documents not required
Ensuring Safe and Effective Rx Utilization

- Program history of comprehensive and aggressive drug utilization review with prescription payment stopped at pharmacy counter
- Developed by physicians and pharmacists
- Tailored for older patients
- Focused on safety and effectiveness (dose, duration, concurrent usage)
Ensuring Safe and Effective Rx Utilization

- Physician focused medical exception process
- A-rated generic substitution
- Step therapy for selected therapeutic classes  
  Examples: sulfonylurea, insulin or metformin before pioglitazone (Actos); calcium acetate (PhosLo) before sevelamer (Renagel); culture and sensitivity test results to choose antibiotic prior to linezolid (Zyvox)
- Drug utilization coordinated with Part D drug plans
The Pennsylvania Academic Detailing Program, 2005 - Present

The Independent Drug Information Service

iDiS
Goals

- To provide physicians with current, evidence-based, non-commercial drug information

- To facilitate physician use of the information to make the best prescription choices (efficacy, safety, and cost) for patients
Goals

3rd goal added in 2008

To provide physicians with information for the prevention of hospitalization and institutionalization due to cognitive impairment and associated behavioral problems, falls and mobility problems and incontinence
Program Design

- An innovative program that provides clinicians with the latest findings about the drugs they prescribe
- For primary care offices
- Delivered face-to-face in the primary care office setting by drug educators
Strengths
Service, Credibility, and Integrity

SERVICE
- Providing useful, practice-relevant information...
- in a very time-efficient way...
- that would be difficult to assemble oneself...
- delivered in a professional, supportive manner.

CREDIBILITY
- Evidence-based materials, developed by experts
- Non-commercial viewpoint

INTEGRITY
- Only goal is to improve prescribing and patient care
- No pharmaceutical company funding
- Salary is not based on sales performance
Goal 1: To provide physicians with current, evidence-based, non-commercial drug information

HOW?

- Offer a flexible schedule for visits
- Respond to questions knowledgeably, honestly, and with the weight of the evidence
- Offer free CME credits to add value to the interaction (1,799 issued)
- Present easy to use materials in a pleasant demeanor as professional training
- Build long term relationship with the office
Goal 2: To facilitate physician use of information to make the best Rx choices (efficacy, safety, and cost) for patients

HOW?

- Identify the physician’s needs, priorities, and concerns
- Offer tools and resources to facilitate better choices (data summaries, patient education materials, prescribing tools)
- Refrain from excessive bashing of drug manufacturers
- Provide CME website access
Program Structure

- Each clinical topic becomes an educational module that includes key components
- Staff have no affiliations with a pharmaceutical company, paid or unpaid
  - No Consulting
  - No Employment
  - No Manufacturer Speakers Bureau, Seminars, or Conferences
Module Components

- **The Un-Ad**
  a short, glossy overview of the data

- **The Evidence Document**
  the meaty material with supporting data and references

- **Laminated Prescriber Reference Card**

- **Age Appropriate Patient Education Materials**
Life after Vioxx...

The unexpected withdrawal of Vioxx in September 2004, followed by Bextra in April 2005, has led many physicians to reassess the place of selective cox-2 inhibitors in pain management. These concerns were heightened last spring when the FDA applied the same “black box warning” to all NSAIDs as well, cautioning that they each can increase the risk of cardiovascular events. What is really known about the comparative efficacy and safety of these drugs?

Clearing the air about efficacy.
The overwhelming evidence from clinical trials shows that selective cox-2 inhibitors do not have any stronger analgesic efficacy than conventional NSAIDs such as naproxen (e.g., Aleve) or ibuprofen (e.g., Naprosyn). Different patients may respond differently to different analgesics, but there’s virtually no evidence that the cox-2 drugs relieve pain any better than their older counterparts. Efforts to discredit campaigns directed at patients created an aura of unreasonableness that was not backed up by clinical trial data.

A word on gastroprotection.
The main advantage of drugs like Vioxx (rofecoxib) or Celebrex (celecoxib) was the expectation that they would lower the risk of gastrointestinal bleeding compared to older NSAIDs. However...

- this protection was relative, not absolute
- concurrent use of low-dose aspirin for gastroprotection can sharply reduce the protection offered by these drugs
- only a small proportion of patients who will need chronic analgesics are at high risk of NSAID-induced gastric bleeding in the first place

- there are other effective ways of protecting patients from analgesic-induced gastric side effects, such as adding a proton-pump inhibitor to a conventional NSAID.

Which patients are at most risk for g.i. side effects?

| Older age | History of previous ulcer disease | Ulcer history | NSAID use
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>30% of older patients</td>
<td>20% of patients with ulcer disease</td>
<td>10% of patients</td>
<td>5% of patients</td>
</tr>
</tbody>
</table>

The tipping point for cardiovascular risk.
There has long been concern about whether selectively inhibiting the cox-2 enzyme might increase the risk of cardiovascular events through a variety of thrombogenic effects as well as other mechanisms. A key randomized trial of rofecoxib (Vioxx) published in 2000 unexpectedly demonstrated a 4-fold increase in the rate of myocardial infarction in patients randomized to that drug.

Several large observational studies since then have also found higher rates of MI in patients taking Vioxx. In September 2005, a Merck-sponsored randomized clinical trial found that patients given Vioxx had twice the number of MIs or strokes that controls did. The company withdrew the drug from the market. Bextra (valdecoxib) was withdrawn seven months later.

What about the benefits and risks of the drugs that remain?
Confusion increased when FDA warned in April 2005 that all NSAIDs and the remaining selective cox-2 inhibitor, Celebrex (celecoxib), would be required to carry the same black box warning that they can increase the risk of cardiovascular events. This created concerns for physicians and patients over the whole class of agents but provided little guidance on what to do or whether the risk is the same for all of these drugs. The evidence suggests it is not. We have reviewed the data from all available randomized controlled trials (RCTs) and epidemiological (epi) studies and summarize it here.
The Un-Ad, pages 3 and 4

Back to basics.

One good outcome of the current resurgence of interest in the risks and benefits of the coxibs and NSAIDs is that many prescribers have begun to rethink their management of acute and chronic pain.2 Pain specialists and rheumatologists recommend this approach:6

1. Start with acetaminophen (Tylenol, etc.). Because it is sold over-the-counter and has been available for decades, many clinicians underestimate the utility of this drug. Unlike a pain has contraindications such as liver disease, alcoholism, or poorly controlled hypertension, consider i.g. t.i.d. q.i.d. as an initial pain medication. This may well be adequate for a significant number of patients and can form the foundation of further treatment for others.

2. Naproxen is probably the safest NSAID in terms of cardiac risk. If a non-steroidal NSAID is needed, the bulk of evidence indicates that naproxen carries the lowest cardiac risk, and may even be cardioprotective to a small degree. (But it should not be used to replace low-dose aspirin for this purpose.) Naproxen is also available at low cost from multiple generic manufacturers [see cost comparison chart]. It should be taken with meals or milk. If gastrointestinal symptoms develop, or a patient is at high g.i. risk [see box], consider adding an H2 blocker or a proton pump inhibitor. There is evidence that taking aspirin along with a conventional NSAID can provide gastrointestinal protection comparable to that provided by Celebrex.4

3. All patients who require cardioprotective use of low-dose aspirin should receive it regardless of their NSAID regimen. Unfortunately, the available evidence suggests that (a) low-dose aspirin reduces the modest gastrointestinal benefit of the cox-2 inhibitors, and (b) this does not seem to protect against the elevated risk of MI caused by the coxibs.

4. Whatever regimen is chosen, prescribe the lowest dose that will control pain, and the shortest duration of therapy. Monitor patients for side effects including fluid retention, hypertension, reductions in renal function, and evidence of gastrointestinal toxicity (abdominal pain, black stools, fecal occult blood, anemia).

Who really needs a cox-2 inhibitor? The recommended approach will work best for most patients. The available data indicate that the one cox-2 inhibitor remaining on the market, Celebrex, appears to pose less cardiac risk than did Vioxx and Bextra, and little is known about its safety compared to other non-selective NSAIDs. However, the greater rate of cardiac events seen at high doses in placebo-controlled trials is worrisome. In the two studies, the data suggest that Celebrex is reserved for patients who require an NSAID at an increased risk of the gastrointestinal complications from which it provides modest protection, and cannot tolerate the suggested regimens.

In summary...

The renewed concern about the safety and efficacy of old and new NSAIDs can provide a fresh opportunity to re-assess the approach to pain management. In many instances, such a simple assessment will enable patients to experience better analgesic results with lower risk of cardiovascular as well as gastrointestinal side effects.


Balanced data about medications.
### LDL goals and levels to initiate therapy, by risk category

<table>
<thead>
<tr>
<th>Risk category</th>
<th>LDL level at which to initiate therapeutic lifestyle changes (TLC)</th>
<th>LDL level at which to consider drug therapy</th>
<th>LDL goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low risk: 0-1 risk factors</td>
<td>210 mg/dL</td>
<td>2190 mg/dL (optional for 160-185 mg/dL)</td>
<td>&lt;160 mg/dL</td>
</tr>
<tr>
<td>Moderate risk: 2+ risk factors with 10-year risk &lt; 10%</td>
<td>2130 mg/dL</td>
<td>2160 mg/dL</td>
<td>&lt;150 mg/dL</td>
</tr>
<tr>
<td>Moderately high risk: 2+ risk factors with 10-year risk 10-20%</td>
<td>2130 mg/dL</td>
<td>2110 mg/dL (optional for 160-129 mg/dL)</td>
<td>&lt;150 mg/dL (consider &lt;100 mg/dL)</td>
</tr>
<tr>
<td>High risk: CAD or CAD-risk equivalents, or 2+ risk factors with 10-year risk &gt;20%</td>
<td>2100 mg/dL</td>
<td>2100 mg/dL (optional for selected patients 70-99 mg/dL)</td>
<td>&lt;100 mg/dL (consider &lt;70 mg/dL)</td>
</tr>
</tbody>
</table>

### Percentage LDL lowering required to achieve target LDL levels

<table>
<thead>
<tr>
<th>Baseline LDL (mg/dL)</th>
<th>100</th>
<th>130</th>
<th>160</th>
<th>190</th>
<th>220</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target LDL (mg/dL)</td>
<td>70</td>
<td>100</td>
<td>130</td>
<td>160</td>
<td>190</td>
</tr>
<tr>
<td>% Lowering</td>
<td>30%</td>
<td>23%</td>
<td>19%</td>
<td>16%</td>
<td>12%</td>
</tr>
<tr>
<td>% Lowering</td>
<td>46%</td>
<td>38%</td>
<td>32%</td>
<td>27%</td>
<td>22%</td>
</tr>
</tbody>
</table>

**Use atorvastatin 80 mg/day or rosuvastatin 40 mg/day**
**Use any statin that lowers LDL by <40%**
**Use any statin that lowers LDL by 40-50%**
**Already at goal**

These are general recommendations only; specific clinical decisions should be made by the treating physician based on an individual patient’s clinical condition.

### Expected percentage LDL lowering for different statins

<table>
<thead>
<tr>
<th>Drug</th>
<th>5</th>
<th>10</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosuvastatin (Crestor)</td>
<td>38%</td>
<td>43%</td>
<td>48%</td>
<td>53%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Atorvastatin (Lipitor)</td>
<td>-</td>
<td>37%</td>
<td>43%</td>
<td>49%</td>
<td>-</td>
<td>55%</td>
</tr>
<tr>
<td>Lovastatin (Mevacor, generics)</td>
<td>-</td>
<td>21%</td>
<td>29%</td>
<td>37%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lovastatin (Altoprev)</td>
<td>-</td>
<td>21%</td>
<td>29%</td>
<td>-</td>
<td>42%</td>
<td>-</td>
</tr>
<tr>
<td>Simvastatin (Zocor, generics)</td>
<td>23%</td>
<td>27%</td>
<td>32%</td>
<td>37%</td>
<td>42%</td>
<td>-</td>
</tr>
<tr>
<td>Pravastatin (Pravachol, generics)</td>
<td>-</td>
<td>20%</td>
<td>24%</td>
<td>29%</td>
<td>-</td>
<td>35%</td>
</tr>
<tr>
<td>Fluvastatin (Lescol)</td>
<td>-</td>
<td>-</td>
<td>21%</td>
<td>27%</td>
<td>-</td>
<td>35%</td>
</tr>
</tbody>
</table>

- Expected to lower LDL by ≥50%
- Expected to lower LDL by 40-50%
- Expected to lower LDL by <40%
- Not available at this dose
Age Appropriate Patient Education Material, cover and back
How is depression treated?

The most common treatments include counseling, also called talk therapy or psychotherapy, and antidepressant medications.

Counseling

Counseling helps people understand their feelings, deal with troubling relationships or problems, and make healthy choices. Counseling works as well as medications for some people, especially those with mild depression, and is generally a good option.

It can also be used along with antidepressant medication. Spending time with friends, family, and support networks can also help relieve symptoms of depression.

Antidepressant medications

Many antidepressant medications are available. When used as directed, most commonly used medications are similarly effective. Antidepressants start to work in 4-6 weeks, so it is important to follow your doctor’s instructions and take your medicine as directed, even if you do not feel better right away. Medications work differently in older people, so your doctor may start with a low dose and adjust the type or dose over time.

Some common antidepressants are:

<table>
<thead>
<tr>
<th>Drug class</th>
<th>Name of Drug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selective serotonin reuptake inhibitors (SSRIs)</td>
<td>Prozac (fluoxetine), Zoloft (sertraline), Paxil (paroxetine)</td>
</tr>
<tr>
<td>Serotonin and norepinephrine reuptake inhibitors (SNRIs)</td>
<td>Effexor (venlafaxine), Pamelor (desvenlafaxine)</td>
</tr>
<tr>
<td>Atypical antidepressants</td>
<td>Wellbutrin (bupropion), Trazodone (desvenlafaxine)</td>
</tr>
<tr>
<td>Dual-action antidepressants (MAOIs)</td>
<td>Nardos (moclobemide), St Mary’s (phenelzine)</td>
</tr>
<tr>
<td>Mood stabilizers</td>
<td>Depakote (valproate)</td>
</tr>
</tbody>
</table>

Side effects are common and can differ for different medications. Common side effects of SSRIs include upset stomach, restlessness, trouble sleeping, headaches, and sexual dysfunction. Other drugs will have different side effects. Many side effects become less severe or go away with continued use. Some people find that starting on these drugs initially makes them feel worse, and may even cause them to think about hurting themselves. This may be a medication side effect. Call your doctor immediately to talk about these feelings or any other side effects you may be having.

It is important to continue taking your medicine after you start feeling better, usually for at least 6 months. Stopping your medicine too quickly can make you feel sick and cause dizziness, upset stomach, fatigue, ache, chills, anxiety, and irritability. Your doctor will work with you to decide which medicine is best for you, how long to take it, and how and when to stop taking it.

What can you do?

You can do many things to help yourself feel better.

- Make time to relax.
- Identify problems and work on fixing them.
- Think positively.
- Be physically active, 30-60 minutes per day, most days of the week.
- Spend time outdoors.
- Get involved with groups or volunteer work.
- Spend time with friends, family, and people who can support you.

Remember, depression is not a normal part of getting older, and treatment is available. Treatment takes time, so be patient. Follow your doctor’s instructions, stay committed to your goals, and talk about how you feel.

If you need help

Many resources are available for you. Call or go online for more information.

- American Geriatrics Society
  www.healthaging.org
  1-800-555-4216
- Geriatric Mental Health Foundation
  www.treatmenthelps.org
  1-877-464-7869
- National Institute of Mental Health
  www.nimh.nih.gov
  1-800-421-2222
- National Mental Health Association
  www.nmha.org
  1-800-990-9642

If you are in crisis and need help right away, call this 24-hour help line:
National Suicide Prevention Lifeline
1-800-273-TALK [1-800-273-8255]
Educational Modules

- Nonsteroidal anti-inflammatory drugs (2005)
- Acid suppressing therapy (2006, 2011)
- Antiplatelet therapy (2006, 2009)
- Cholesterol-lowering drugs (2006, 2009)

COMPLETE SET OF EDUCATIONAL MATERIALS FOUND AT RXFACTS.ORG
Educational Modules

- Depression management in the elderly (2008)
- COPD (2009)
- Osteoporosis (2010)
- Insomnia (2010)
- Atrial fibrillation (2011)
- Chronic pain management (2011)

COMPLETE SET OF EDUCATION MATERIALS FOUND AT RXFACTS.ORG
Long Term Living Educational Modules

Preventing the need for hospitalizations and institutionalizations

- Falls and mobility management (2009)
- Cognitive impairment and associated behavioral problems (2009)
- Incontinence (2010)

COMPLETE SET OF EDUCATION MATERIALS FOUND AT RXFACTS.ORG
What Makes a Medication Educator Unique?

DRUG REP
- Serves: drug company
- Product: drug
- Goal: maximize use of a particular drug for profit$

MEDICATION EDUCATOR
- Serves: doctor
- Product: facts about drug
- Goal: share knowledge with prescriber that will result in optimized prescription choices
Medication Educators

- Clinical background - nurses, pharmacists, allied health; 11 individuals, 10 FTE total
- Located in areas with highest density of PACE enrollees
- Multi-day training sessions provided by Harvard Medical School faculty
- Regular follow-up teleconferences for updates, feedback
- Quarterly one-on-one visits, establishing ongoing relationships with prescribers
The Harvard/Brigham Connection

- Systematic review of current medical literature → evidence-based synthesis
- Development of user-friendly materials
- Follow-up, consultant support
- Responses to clinical questions
- Fiscal management
- Program evaluation
- Web presence – RxFacts.org
TOPIC VISITS
PENNSYLVANIA ACADEMIC DETAILING PROGRAM
OCT 2005 - FEB 2011

INSOMNIA (NEW TOPIC) 414
OSTEOPOROSIS 726
INCONTINENCE 752
COPD 696
COGNITIVE IMPAIRMENT 704
FALLS / MOBILITY 666
DEPRESSION 612
TYPE 2 DIABETES 671
ANTIHYPERTENSIVES 445
LIPID-LOWERING 542
ANTIPLATELETS 550
ACID SUPPRESSION 548
COX-2s / NSAIDs 447
IDIS INTRODUCTION 316
ANNUAL VISITS
PENNSYLVANIA ACADEMIC DETAILING PROGRAM
OCT 2005 - DEC 2011 (EST.)

VISITS PER YEAR

<table>
<thead>
<tr>
<th>Year (Est.)</th>
<th>Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCT - DEC 2005</td>
<td>266</td>
</tr>
<tr>
<td>2006</td>
<td>1,062</td>
</tr>
<tr>
<td>2007</td>
<td>1,154</td>
</tr>
<tr>
<td>2008</td>
<td>1,308</td>
</tr>
<tr>
<td>2009</td>
<td>1,795</td>
</tr>
<tr>
<td>2010</td>
<td>2,125</td>
</tr>
<tr>
<td>2011</td>
<td>2,339</td>
</tr>
</tbody>
</table>
CUMULATIVE VISITS
PENNSYLVANIA ACADEMIC DETAILING PROGRAM
OCT 2005 - FEB 2011, ACTUAL

CUMULATIVE VISITS
OCT - DEC 2005 2006 2007 2008 2009 2010 2011 (YTD)

- 266 1,328 2,482 3,790 5,585 7,710 8,089

CUMULATIVE VISITS
0 1,500 3,000 4,500 6,000 7,500 9,000
<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean ± SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The program provides me with useful information about commonly used medications.</td>
<td>4.7 ± .4</td>
</tr>
<tr>
<td>The content represents unbiased and balanced information about drugs.</td>
<td>4.8 ± .5</td>
</tr>
<tr>
<td>The program provides a perspective on prescribing that is different from what I get from other sources.</td>
<td>4.3 ± .8</td>
</tr>
<tr>
<td>My Drug Education Consultant is a well-informed source of evidence-based information about drugs I prescribe.</td>
<td>4.8 ± .4</td>
</tr>
<tr>
<td>I find the patient materials useful in my practice.</td>
<td>4.6 ± .5</td>
</tr>
<tr>
<td>Being able to get Continuing Medical Education credits from Harvard is a valuable component of the service.</td>
<td>4.5 ± .7</td>
</tr>
<tr>
<td>It makes sense for the Commonwealth of Pennsylvania to devote resources to this activity.</td>
<td>4.6 ± .6</td>
</tr>
<tr>
<td>I would like to see this program continue.</td>
<td>4.8 ± .4</td>
</tr>
<tr>
<td>The program has provided me the information that will help me in the care of my patients.</td>
<td>4.7 ± .5</td>
</tr>
</tbody>
</table>
Effect on Prescribing

- Cox-2’s
- PPI’s
EFFECT ON DRUG UTILIZATION AFTER COX-2 / NSAID MODULE

MONTHS BEFORE AND AFTER INTERVENTION

COXIB SPENDING PER PHYSICIAN

INTERNAL CONTROL COHORT

INTERVENTION COHORT

IDIS INTERVENTION MONTH
# PPI COST SAVINGS ANALYSIS

<table>
<thead>
<tr>
<th>PRESCRIBING STRATUM</th>
<th>PHYSICIANS</th>
<th>6-MO. PPI SAVINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low (≤ 19 PPI scripts in past year)</td>
<td>60</td>
<td>$23,436</td>
</tr>
<tr>
<td>Low (20 – 40 scripts)</td>
<td>68</td>
<td>$53,285</td>
</tr>
<tr>
<td>Medium (41 – 75 scripts)</td>
<td>71</td>
<td>$69,197</td>
</tr>
<tr>
<td>High (76+ scripts)</td>
<td>92</td>
<td>$139,983</td>
</tr>
<tr>
<td>6-mo. total, weighted by distribution</td>
<td></td>
<td>$285,901</td>
</tr>
</tbody>
</table>

Questions / Comments