



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John M. Colmers, Secretary

DEC 23 2009

The Honorable Thomas M. Middleton
Chairman
Senate Finance Committee
3 East Miller Senate Office Bldg.
Annapolis, MD 21401-1991

The Honorable Peter A. Hammen
Chairman
House Health and Government Operations Committee
241 House Office Bldg.
Annapolis, MD 21401-1991

**RE: HB 574/SB 708 (2009) – Prescription Drugs – Evidence-Based
Prescriber Education and Outreach Program – Report**

Dear Chairmen Middleton and Hammen:

During the 2009 legislative session, the General Assembly considered HB 574/SB 708 – *Prescription Drugs – Evidence-Based Prescriber Education and Outreach Program*. Although the bill did not pass, the Department offered to study how best to develop a prescriber education and outreach program in Maryland. The study is enclosed.

HB 574/SB 708 sought to create a program (known colloquially as an 'academic detailing' program) to provide health care professionals with evidence-based information to support their prescribing decisions. It would have required DHMH, in consultation with the Board of Physicians and the Board of Pharmacy, to work with the University of Maryland's School of Pharmacy to develop, implement and promote the program beginning April 1, 2011, subject to the availability of funds (the Department would have been allowed to contract with the School to administer the program). The program's purpose was to provide health care professionals authorized to prescribe or dispense prescription drugs with information and education on the comparative efficacy, safety and cost-effectiveness of prescription drugs, primarily through in-person outreach and education sessions (on a one-on-one basis when practicable), in the health care professionals' workplace. The Department was to provide the information and education as funding permits, or for a fee.



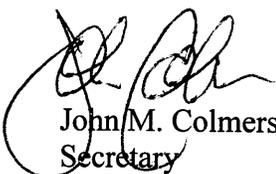
The Honorable Thomas M. Middleton
The Honorable Peter A. Hammen
Page Two

During consideration of HB 574 by the Health and Government Operations Committee, the Department identified several potential issues relating to funding and administration of the program. The Department supported the bill with amendments requiring DHMH to study and report on the feasibility of establishing an academic detailing program in Maryland. Although the amendments were not adopted and the bill was eventually withdrawn, the Department committed to undertake the study because of its support for the general concept of academic detailing programs. The study has been completed and a copy is enclosed for your consideration.

The Department will continue to work with stakeholders to determine the appropriate staffing levels and adequate funding sources necessary to establish an effective academic detailing program in the State. The Department believes that any program of this nature will require a significant investment of resources up-front to implement the type of program that meets the needs of Maryland's diverse population. A first step toward an academic detailing program may be to provide computerized alerts concerning drug selection. These computerized alerts would occur when prescribers are sending prescriptions electronically (better known as e-prescribing). For instance, an alert could identify alternative, more cost-effective drugs. Such additional information would enable prescribers to make more informed choices about health care decisions. Due to fiscal constraints, however, the Department has delayed plans to implement e-prescribing for the Medicaid program.

Thank you for your consideration of this report. If you have questions or need more information about this topic, please contact Shawn Cain, Assistant Director of the Office of Governmental Affairs, at (410) 767-6509.

Sincerely,



John M. Colmers
Secretary

Enclosure

cc: John Folkemer
Charles Lehman
Athos Alexandrou
Tricia Roddy
Shawn Cain
Sarah Albert

The Hilltop Institute



analysis to advance the health of vulnerable populations

Academic Detailing: A Review of the Literature and States' Approaches

November 25, 2009

Academic Detailing: A Review of the Literature

Table of Contents

Introduction	1
Drug Information Initiatives	2
The Independent Drug Information Service.....	2
The Alosa Foundation and Generics are Powerful Medicine Website	2
Drug and Therapeutic Information Service and the Therapeutic Advice and Information Service: Australia	2
Drug Effectiveness Review Project.....	3
Consumer Reports Best Buy Drug	3
Developing an AD Program.....	4
Program Characteristics	4
Detailer Characteristics.....	4
Selecting "Effective" Treatments	4
Financing	5
Evaluation.....	5
U.S. and State Programs/Legislation and Canada.....	6
Federal Legislation.....	6
The Consumer and Prescriber Grant Program	6
Massachusetts	6
Vermont.....	7
Pennsylvania.....	7
Washington, D.C.	8
South Carolina	9
Maine	11
New York	11
Canada	12
Research on Academic Detailing.....	13



Consideration of a Maryland Pilot	14
Mission and Visioning and the Underlying Philosophy.....	15
Structure.....	15
Scope	17
Cost Estimate	18
Conclusion	18
References	19
Appendices	
A. Academic Detailing/Prescriber Education Outreach Programs	26
B. State Prescriber Education Program (<i>updated September 2009</i>).....	31
C. A Prescriber Education/Academic Detailing Timeline.....	33
D. Software Used in Academic Detailing.....	34
E. Grantees of the Consumers and Prescribers Program	37
F. Cost Estimate for an Academic Detailing Program in Maryland	40



Academic Detailing: A Review of the Literature

Introduction

We surveyed the literature to understand the current status of legislation among states regarding academic detailing/prescriber education (AD), as well as to describe existing efforts, including implementing agents (government, academic, and private), funding approaches, efforts to gain provider participation/buy-in, and evaluations of effectiveness, especially cost-effectiveness. Types of programs were considered in regard to focus on particular patient populations, drugs/drug classes, or condition-specific approaches.

Literature was found on nine states in which AD is currently underway using widely varying approaches. Additionally, informants in four states and the District of Columbia were interviewed by phone. Attachments A and B briefly describe each on a state basis and contain a timeline of developments.

Research indicates that AD, the anti-pharmaceutical detailing correction, has a moderate, cost-effective (or at least cost-neutral) impact and is likely to improve quality of care by diminishing the use of inappropriate medications. A systematic review of studies of AD found that bias and use of multifaceted methodologies limited the value of the evidence of the impact of AD in most studies (O'Brien et al., 2007).

There are critics who suggest that AD could serve as a means to limit access to newer, breakthrough drugs in the interest of saving money (Pitts, 2007). Treatises such as *Protecting Americans from Drug Marketing Act—Who Will Protect US from the Politicians* (Sullivan, 2009) and numerous pro-pharmaceutical industry/anti-AD YouTube offerings are readily available. Reports from state calls, made for this study, indicated that pharmaceutical industry representatives were very active in every facet of planning and implementation of state-based initiatives to challenge and block the efforts. In light of such criticisms, it is important to maintain AD as a mechanism to provide unbiased information about prescription medicines: “Academic detailing is not simply about prescribing generics...Academic detailing is a quality-driven endeavor that helps physicians make appropriate clinical decisions based on the best available safety, efficacy, and cost-effectiveness data” (RxFacts, 2009). Academic detailing should not be portrayed, or used, as a primary means for controlling or reducing costs as this might adversely impact its political success.



Drug Information Initiatives

While some programs develop their own content and materials for academic detailing, there are several ongoing, formal efforts to develop materials that are available for use on a broad scale.

The Independent Drug Information Service

The Independent Drug Information Service (iDiS), a program of the Alosa Foundation, is sponsored by Pennsylvania's Pharmaceutical Assistance for the Elderly (PACE) Program through its Department of Aging. Physicians and researchers at the Harvard Medical School gather and summarize information from journals and other sources and make it available for prescribers, objectively and without commercial ties, but rather based on clinical evidence of effectiveness, safety, and appropriateness (RxFacts, 2009). Details on the implementation and evaluation of this initiative are on page 7.

The Alosa Foundation and Generics are Powerful Medicine Website

The Alosa Foundation is a not-for-profit organization that researches and disseminates evidence-based information on medications. Its programs include the Independent Drug Information Service, the *Generics are Powerful Medicine* (GPM) website, and the Harvard Interfaculty Initiative on Medicines and Society. GPM is a consumer-focused website that provides information to make informed choices about the safety and effectiveness of generic drugs, and specifically targets low-income and uninsured people. The Harvard Interfaculty Initiative on Medicines and Society is a collaborative of Harvard faculty, students interested in the development, regulation, and use of, and payment for, prescription drugs. The Alosa Foundation contracts with states to develop and manage academic detailing programs (Jackowski, 2009).

Drug and Therapeutic Information Service and the Therapeutic Advice and Information Service: Australia

Drug and Therapeutic Information Service (DATIS) is a component of the National Prescribing Service (NPS) and is a limited nonprofit organization funded by the Australian Government Department of Health and Aging. In a presentation delivered in February 2008, Frank May indicated that, since its inception in 1992, DATIS boasts high (>90%) acceptance by providers and, from 1994 to 2005, a cumulative savings to the NPS of nearly \$148 million (May, 2008). However, like many models, DATIS includes multiple interventions beyond AD, so the impact noted is not only attributable to AD. The Therapeutic Advice and Information Service (TAIS) is also run by the NPS; health professionals can call or fax TAIS or go online for prescription drug information. Although neither of these services involves actual academic detailing, they strive to provide evidence-based, objective information to prescribers.



Drug Effectiveness Review Project

Drug Effectiveness Review Project (DERP) was started in 2003 as a result of the Oregon Medicaid Program's desire to establish a preferred drug list that would first consider effectiveness, and then (when multiple drugs in a class were equally effective) consider price, in an effort to contain rising drug costs. A collaborative enterprise grew from this initiative between public and private entities to produce "systematic, evidence-based reviews of the comparative effectiveness and safety of drugs in many widely used drug classes, and to apply the findings to inform public policy and related activities in local settings" (University of Oregon Health and Science, 2009). DERP consists of participating organizations (currently 11 states, including Maryland and a Canadian drug agency), the Center for Evidence-Based Policy at the Oregon Health & Science University, which administers the program, and several Evidence-Based Practice Centers (EPCs) (DERP, 2009). Through a self-governing process, the participating organizations, which each contribute funding on an equal basis, determine the key questions, drug classes to be addressed by systematic review, and approval of final reports. Initially a 3-year project, DERP has now entered a third phase, from fall 2009 through 2012. DERP has been criticized as "thinly veiled cost-containment" (Neuman, 2006) and lacking full transparency of the review, comment, and final drafts of its systematic reviews. In particular, the local use of DERP information has been criticized as being overly focused on cost rather than quality of care.

Consumer Reports Best Buy Drug

The Consumer Reports Best Buy Drugs is a service by the Consumers Union, "an independent, nonprofit organization whose mission is to work for a fair, just, and safe marketplace and to empower consumers as they research and buy products and services." Funding comes from state Attorney Generals from all 50 states from an award received in the prosecution of Warner-Lambert, a division of the pharmaceutical company Pfizer, for the unlawful marketing of the drug Neurontin (gabapentin). Funds also come from a number of other sources, including the Engelberg Foundation, and staff time is contributed by the Consumers Union.



Developing an AD Program

In its template for developing AD, the Academic Detailing Planning Initiative (ADPI) presents a set of principles and guidelines based on experience and research in the field (Reck, 2008). The following concepts are included in the template.

Program Characteristics

Overall, the ADPI suggests that programs be based on one-on-one interactions between prescribers and educators based on mutual learning and the expressed needs of the prescriber in order to provide the most efficacious (evidence-based/effective/safe) care, particularly when care for a patient is challenging. AD should not be presented as an effort to reduce cost. Interactions should be service-based, with topics selected by the physician, and include nonpharmacologic treatment.

As found in research on the most effective AD approaches, ADPI recommends that exchanges be one-on-one and face-to-face, which, though more expensive, is more effective. Consistency in assignment and the one-on-one exchange facilitates building personal relationships and trust between the academic detailer and the prescriber. Other desirable characteristics for the AD interaction are that it be empathetic, respectful, service-oriented, and unimposing.

Detailer Characteristics

Academic detailers need to be knowledgeable about the evidence and the underlying science of the drugs/drug classes they present and should have direct clinical experience, typically gained through medicine, nursing, or pharmacy.

Detailers working primarily in the field need infrastructure to support them—a highly skilled, centralized staff and appropriately networked software are needed to connect centrally. Software should include the capacity for data management and cost accounting. See Appendix D for a description of software that has been used for AD.

Selecting “Effective” Treatments

The general approach to what treatments are recommended considers the most scientifically rigorous information on safety and clinical effectiveness. The best information originates from randomized clinical control trials that utilize comparative effectiveness research principles. This information is often found in systematic reviews. Once the most effective treatment(s) is(are) identified, cost-effectiveness can be considered, but only when cost is a factor to select among multiple highly effective drugs; cost should never be the primary consideration.



Financing

A number of financing mechanisms are used for AD. Sources of funds include fees charged to manufacturers and labelers doing business in a particular state or with a particular program that includes prescription drug coverage either as a flat fee or as a fixed percentage of the cost to the state in purchasing drugs from the manufacturer/labeler. The District of Columbia charges licensing fees for detailers. It is reported that these funding mechanisms are administratively difficult in terms of the infrastructure necessary to manage the funds and in terms of getting the manufacturers/labelers to pay. Recommendations include, where feasible, utilizing the available Medicaid federal match to enlarge the dollars available for that program. Funding can also be feasible where consortia or collaborations help spread the cost across many entities instead of each or one bearing the weight of costs (Reck, 2008). Studies of the cost of AD indicate that potential savings exist through the utilization of less expensive and/or fewer inappropriate drugs to offset the costs of AD (O'Brien et al., 2007). However, none of the current AD programs are as extensive as the reported 90,000 detailers and \$7 billion that the pharmaceutical companies utilize in detailing their products.

Evaluation

As with any new program implementation, it is necessary to understand the extent to which the intervention achieves its short- and long-term goals. Different types of evaluation are needed at various points in time and must be planned while developing the intervention to ensure that the appropriate measures (data) are available. Evaluation can be formative, considering the procedural steps of designing and implementing the intervention, or summative, considering the short- and long-term goals and outcomes. Formative evaluation might include analyzing the involvement of key stakeholders or the availability of needed resources, such as space, equipment, and trained personnel.

Measures recommended by the ADPI provide a comprehensive process for an evaluation.

Process measures:

- Number and duration of visits
- Conditions discussed
- Geographic distribution of providers
- Provider characteristics
- Number of provider inquiries responded to provider and detailer characteristics
- Number of CME post-tests completed
- Detailer performance measures



Outcome measures:

- Qualitative (provider participation and satisfaction)
- Quantitative (analysis of pharmaceutical claims data)

U.S. and State Programs/Legislation and Canada

Federal Legislation

In April 2009, the House and the Senate introduced companion legislation addressing academic detailing, “The Independent Drug Education and Outreach Act of 2009” (S.767 and H.R. 1859), as amendments to the Public Health Service Act. The basic features of the bills are the awarding of grants or contracts for the development and production of educational materials and the deployment of health professionals to educate prescribers on the relative effectiveness, safety, and costs of prescription, nonprescription, and nondrug treatments. The Act states the preference for these activities to be directed to prescribers caring for participants of federally funded health programs. The Act was referred to the House Energy and Commerce Committee.

The Consumer and Prescriber Grant Program

In 2004, Warner-Lambert was ordered to pay a \$38 million settlement to all 50 states due to unlawful marketing of the drug Neurontin and \$152 million for Medicaid-related damages and penalties. Twenty-one million dollars of the settlement is the basis for the creation of the Consumer and Prescriber Grant Program (CPGP), which funds initiatives that educate consumers and health professionals about drugs and pharmaceutical marketing practices. Maryland received \$2.2 million under the Medicaid fraud portion of the settlement. Appendix E lists the grantees and projects funded under the CPGP.

Massachusetts

In addition to AD, Massachusetts is considering preventing pharmaceutical companies from “micro-marketing” to physicians, which involves the use of prescription data to target their messages and financial inducements/gifts (The Prescription Project, 2008). The Massachusetts legislation (Chapter 111. Public Health) references Pennsylvania’s PACE/iDiS, University of Vermont’s Area Health Education Center’s AD Program, and DERP as models to emulate. The legislation features face-to-face encounters and methods from “behavioral science, educational theory, and pharmaceutical industry data and outreach techniques, to develop evidence-based therapeutic effects and cost-effectiveness” (The General Laws of Massachusetts, 2009). The Massachusetts Health Data Consortium, in conjunction with the state’s medical society and BlueCross and BlueShield, is facilitating e-prescribing for providers, including education on patient safety and risks associated with medications.



The Hilltop Institute

Vermont

Vermont's AD program was established in 1999 as a formulary management tool for BlueCross BlueShield. The Vermont Legislature supported its expansion in 2007, and AD was placed under a chapter on prescription drug cost containment stipulating the use of evidence-based guidelines that are *cost-effective* and systematically reviewed. Interestingly, the legislation uniquely mentions the inclusion of investigational treatments. The AD team consists of one physician and one pharmacist and makes visits to small groups rather than individuals because of Vermont's predominant rurality. The AD team focuses on therapeutic, cost-effective prescribing and provides generic drug vouchers for common health conditions. The program has an annual budget of \$50,000, supported by the state, and educates 25 practices/100 prescribers per year. The use of manufacturer fees on a basis of total Medicaid spending has been challenged unsuccessfully by the Pharmaceutical Researchers and Manufacturers Association (PhRMA) in Vermont. PhRMA charged that Vermont's legislation establishing academic detailing violated its First Amendment rights by restricting communication with prescribers, and that it contained other clauses that preempted federal laws (Pharmaceutical Research and Manufacturers Association of America, 2008).

Pennsylvania

According to Tom Snedden (2009), the director of the PACE program, the Pennsylvania AD program, iDiS, is the "grand-daddy" of AD programs. The program started in 2005 and builds on a 25-year history of the PACE, which supplies prescription medicines to 320,000 older Pennsylvanians when their prescriptions are not covered by another program, such as Medicare Part D or Medicaid. No additional authorizing legislation was needed, and the program had the full support of the governor's Office of Health Care Reform. Stakeholder involvement has been minimal. An earlier program by the state medical society addressed the issue more generally but consisted of mailed information. The pharmacy and medical schools collaborate, and the medical society is supportive, but there is no direct involvement. Efforts to expand the program to other populations in the state through the Medicaid program and to state retirees are under consideration.

Funding for PACE/iDiS comes from the state lottery, with proceeds earmarked for services to older adults from its inception; a billion dollars a year is derived from this source. Most of the lottery proceeds go to the PACE program, but they also fund other programs administered by the Department of Aging, such as transportation and senior centers. No Medicaid funds are used in the program, and older Pennsylvanians who receive Medicaid are not eligible for PACE. Also, with the advent of Medicare Part D, PACE assigned 80 percent of its older adult participants to a preferred vendor and pays their deductible, "donut hole," and fees for any uncovered drugs. The AD program costs the state \$1 million a year, which pays for the training, management, and deployment of ten academic detailers, who are experienced pharmacists and nurses, under the



full management of the Alosa Foundation. In our conversation with Tom Snedden, the Pennsylvania AD program has more than recouped its cost in savings to PACE (Snedden, 2009).

iDiS utilizes the findings of researchers and physicians from Harvard, who compile scientifically sound, evidence-based findings on the relative therapeutic value and cost-effectiveness of various drugs and drug classes. Physicians are selected based on the “data mining” of 13 million claims from more than 5,000 doctors based on those with the greatest number of claims and/or enrollees. No other screening criteria or cost are used in an effort to prevent doctors from feeling like they are being singled out. From its beginnings in 2005 1,100 providers have received a total of 4,500 visits. Also in that time frame, 335 CME sessions were completed, and there were 178 independent requests for information made by Pennsylvania providers to the doctors and researchers at the Harvard Medical School. Topics covered during visits with Pennsylvania providers by iDiS Drug Information Consultants include proton pump inhibitors, antihypertensive drugs, antiplatelet therapy, lipid-lowering drugs, and COX-2 inhibitors/nonsteroidal anti-inflammatory drugs.

iDiS has received nearly perfect scores in terms of providers’ feedback on its usefulness (patient materials and application to practice), unbiased and unique information, quality of consultants’ knowledge, and their support for the use of public funds and continuation of the program.

Washington, D.C.

We spoke with two people, including Peggy Keller, executive director of the D.C. Board of Pharmacy, about licensing pharmaceutical representatives. The program relies on self-reporting/identification by the representatives themselves or their employer; otherwise, according to Ms. Keller, it would be difficult to know who is actually performing pharmaceutical detailing. The medical/health community was informed about the program by way of Board of Pharmacy mailings and meetings with stakeholders, including the Medical Society of the District of Columbia, which detailed in a recent newsletter the requirements of the D.C. Act in regard to AD (Medical Society of the District of Columbia, 2008).

Licensing went into effect April 1, 2009, and individuals detailing without a license are subject to a fine up to \$10,000, as well as other sanctions. The new regulations apply to prescription as well as over-the-counter drugs. Detailing is defined as “a representative of a manufacturer or labeler...communicating in person with a licensed health professional or an employee or representative of a licensed health professional...in a non-conference setting...” (District of Columbia, 2009). Detailers must apply for a biannual license and sign an affidavit delineating a code of ethics, have graduated from an institution of higher education, and pay an application fee of \$85 and a licensing fee of \$75 (17 DCMR 8304-8305). License renewal requires a minimum of 15 contact hours of continuing education every two years. As part of the licensure requirement, pharmaceutical detailers must maintain a record of their communications with



The Hilltop Institute

licensed health professionals or their representatives for five years, including the name of the business, date/time/location of the contact, the products discussed, whether or not samples were provided, and the type of materials provided (17 DCMR 8309). The Act also gives providers the opportunity to refuse detailing on a permanent basis and holds the detailer responsible to refrain from contact. The program is overseen by the Board of Pharmacy, which is a component of the District of Columbia Department of Health, Health Professional Licensing Administration (HPLA).

According to Dr. Feseha Woldu, senior deputy director of the Department of Health and administrator of the HPLA, the passage and implementation of the Act and other measures that affect drug utilization, distribution, and prescribing are heavily monitored and frequently questioned by pharmaceutical industry representatives. Dr. Woldu presents the process as having been open and transparent, involving all relevant stakeholders and interested persons, and he states with some incredulity that although there are approximately 2,000 detailers licensed in D.C. and a mere two academic detailers, industry interests “still call every day” (Woldu, 2009).

The D.C. program also includes an AD component that is delivered by two detailers (a physician and an advanced practice nurse) who are trained and managed under contract with the Alosa Foundation and focuses on drugs that are purchased for publicly funded health programs for drugs/conditions where there is heavy utilization. Initial efforts centered on diabetes and antiplatelet therapy. Per Dr. Woldu, providers are very receptive because they lack knowledge about drugs and are “bombarded” by the pharmaceutical industry to prescribe medications that are not based on the best objective evidence. Providers identified via Medicaid claims data as having a high proportion of Medicaid patients with the targeted condition and using high levels of certain drugs are called. Calls were made to approximately 200 providers and as many as possible are seen.

The D.C. process is managed fully through licensing, and although the data used to establish AD priority areas derives from Medicaid claims, there is no direct involvement of the D.C. Medicaid Program or its drug utilization/preferred drug list process.

South Carolina

The South Carolina AD program began in 2007 and is called SCORxE. The AD program is under a five-year contract (two initial years and three one-year renewals) to the South Carolina College of Pharmacy by the health department and is run under its full jurisdiction. Conceived as an initiative by the director of the Medicaid program to reduce the cost of treating mental illness in South Carolina’s public mental health program, there was no specific authorizing legislation, and the AD program is funded at \$1.9 million. An additional impetus for selecting mental health as an initial focus is that the health department is constrained by law from limiting prescribing in



any way for mental illness, HIV, or AIDS. It was felt that an academic detailing intervention might help to control costs.

The AD program was started in six counties, incorporating rural and more urban areas in different regions of the state. Because the Medicaid program framed the AD program as “research” and requested both analytic and evaluative studies, three additional counties were selected as controls. Deployment of four full-time equivalents of Pharm.D.-prepared detailers is planned. The program was introduced to providers by way of letters sent to those providers with either large numbers of prescriptions or large numbers of patients utilizing the targeted drugs, including psychiatrists and primary care physicians. Two letters were sent under the signatures of influential providers in the geographic area of the “targeted” provider to promote the program and then to introduce the detailer (called “consultants” in SCORxE).

Altogether, 9 of South Carolina’s 46 counties are involved, with plans to expand that number over the five-year project. After the first year, three counties were added. Implementation with the new counties experienced a much easier launch, possibly as a result of the experience gained with the initial sites, the new sites being more rural (and possibly more receptive because of less frequent opportunities and attention), and pre-knowledge of the program’s implementation in other areas.

An evaluation done in September 2009 (not yet publicly available) included a qualitative analysis of physicians’ experiences and quantitative analyses of processes such as the number of CME units taken and completed, the duration and number of AD visits, and use of Medicaid claims data to analyze change in utilization and prescribing patterns, as well as overall costs (drugs as well as emergency room use and admissions).

Initial funding is from Medicaid, but other avenues are being sought for future sustainability, including partnering with other payers who indirectly benefit from AD as prescribers modify their prescribing practices based on evidence of efficacy and cost-effectiveness. According to Dr. Sarah Ball, the AD program director at South Carolina College of Pharmacy, there has been little or no challenge from the pharmaceutical industry other than “offering to help” with the process. She stated that Pfizer had even agreed to allow the program to utilize its PHQ-9 instrument for depression screening and monitoring as part of the program. Interestingly, Pfizer, the parent company of Warner-Lambert, was successfully litigated for misrepresentation of its drug Neurontin in giving full attribution for the instrument within the AD program. This situation, which is unique to South Carolina, presents a paradox in a program that focuses on minimizing the impact of pharmaceutical detailing by actually providing a pharmaceutical company with an effective marketing tool. Overall, Dr. Ball feels the AD program is having a positive effect. Providers’ requests for visits are increasing, and through AD, the Medicaid program has derived a good public relations benefit among providers.



Maine

The Maine AD program, the Maine Independent Clinical Information Service (MICIS), is managed by the Maine Medical Association (MMA) and is staffed by two certified physician's assistants, who do AD six hours a week each. The focus of the program initially centered on diabetes and antiplatelet therapy, which were selected because of the associated high costs from drugs, hospitalizations, and emergency room treatment for those conditions. The program uses training and content modules from the Independent Drug Information Service (iDiS), which was started by Pennsylvania's PACE program. Maine also partnered with Vermont and New Hampshire while developing its program and used the resources of Prescription Policy Choices, a private, nonprofit located in the state, which focuses its research and policy development on reducing cost and increasing access to prescription drugs.

Funding comes (or is anticipated) from three sources, including approximately \$300,000 from manufacturers' fees. The Neurontin funding is no longer available, but funds from other relevant settlements are being explored and other grants are being sought. This includes a recently announced Agency for Healthcare Research and Quality (AHRQ) grant for the dissemination of comparative effectiveness research (CER).

The Prescription Drug Academic Detailing Program was established legislatively to go into effect by January 1, 2008 (The Maine Legislature, 2009), under the direction of the Maine Department of Health and Human Services. The program targets prescribers and dispensers (mail-order and brick-and-mortar pharmacies) that provide care and services to individuals. Advisory groups are established primarily from among MMA members who are interested in the particular content area and MaineCare. Data for the project and for evaluation comes from the state's pharmacy benefits manager, Goold Health Systems. Evaluation is planned after the six to eight months of the program to ensure that at least two AD visits have occurred. The evaluation will include factors relating to the detailers' visits, prescriber satisfaction with the service, and, likely, data on prescribing practices pre- and post-intervention. Overall, there is a sense that the program has been well received, with some providers requesting repeat visits.

New York

At its inception, the New York AD program was developed and managed by individuals out of the University of Massachusetts, but it now exists as a partnership between the state health department and New York's four schools of pharmacy in various regions of the state, as part of its State University of New York system. According to Dr. James Figge (2009) of the New York state health department, who oversees the administrative aspects of the program, because of New York's "prescriber prevails" provision in its Medicaid Clinical Drug Review Program, AD detailing was instituted as a means to address prescribing practices that were felt to be costly and unwarranted clinically. Implementing the program through the state's schools of pharmacy and



medicine was considered a “natural” extension of physician education; therefore, the program would not be perceived as the health department telling doctors what to do. Philosophically, the program is based on collegial and collaborative relationships among the principals. Per Dr. Figge, the state’s medical society “loves” the academic focus of the initiative.

The program is paid for by state funds designated for pharmacy utilization management. The program utilizes Pharm.D.s, a group of whom were initially trained by the Alosa Foundation and who now receive their training from the first trainees. Dr. Figge feels that the Alosa partnership has been “indispensable and valuable” to the success of New York’s program. Using Pharm.D.s for AD adds credibility and is especially useful if the individual has a subspecialty in the content area on which is being focused. Providers for the program are targeted on the basis of data analysis and, after receiving an introductory call, receive an initial visit in addition to a follow-up visit. Every “high-volume” prescriber in the state received a visit during the bronchiolitis campaign.

In addition to one-on-one visits, the New York AD program plans to use online self-learning modules, the first of which is now available for pediatric bronchiolitis, identified as an early focus due to the overuse of the drug Synagis (palivizumab). Other areas that will be addressed early are asthma, selected because of the existence of a broad coalition, national guidelines, and its high prevalence associated with heavy emergency room use and admissions; hypertension, due to its “cultural complexity,” disparate racial impact on African Americans, and the interest of some state senators and the governor; and behavioral health, in regard to issues of poly-pharmacy, a large affected population, and high costs. The development of the modules is transparent and involves a statewide coalition of the appropriate clinically focused foundations, subject matter experts, and doctors.

Canada

Canadian AD Collaboration consists of five programs in five provinces and involves 30 detailers. The funding for each program varies from private funding from companies to grant funding to government funding. Continuing medical education credits are offered for participation in the program, and because the program is valued for its evidence-based approach, relevance, and convenience, it is highly valued in the medical community.



Research on Academic Detailing

O'Brien et al. (2009) conducted a systematic review of randomized controlled trials of interventions involving education outreach visits (EOVs). Outcomes were either health professional- or patient-based. Outcomes considered for health professionals were either an increase in appropriate prescribing or a decrease in inappropriate prescribing (e.g., among the elderly, use of antibiotics and use of psychotropics). The effects of “patient-mediated interventions were included for some studies, considering where health provider behavior might be influenced by way of information, prompts, or supports to the patient” (p. 4).

Some studies focused on specific conditions such as diabetes, asthma, cardiovascular disease, and preventive services. Types of interventions included the following: (1) EOV as a component of a more complex intervention compared with no intervention; (2) EOV only (not other activities aimed at addressing prescriber practice) compared with no intervention; (3) EOV compared with interventions that included audit, feedback, and reminders; and (4) one type of EOV compared with another type of EOV (e.g., individual versus group EOV).

The authors' findings included “small to moderate, but potentially important” effects of EOV, though it was unclear whether behavior changes were sustainable, if repeated visiting was needed to maintain changes, or if costs actually outweighed savings in the long run. Findings of some studies also indicated that (1) the type of “visitor” mattered in terms of credibility, with a peer (another general practitioner) being most appropriate; (2) multifaceted interventions had a larger effect than EOV alone (8.8 percent compared to 5 percent).

Social marketing principles were recommended, including (1) needing to understand the stage of change and readiness for change for particular prescribers, and then targeting the intervention to the appropriate stage; (2) conducting interviews to understand individual motivation and barriers to change; (3) using opinion leaders for maximum influence; (4) allowing provider participation in developing interventions; and (5) using concise messaging and repeating key messages.

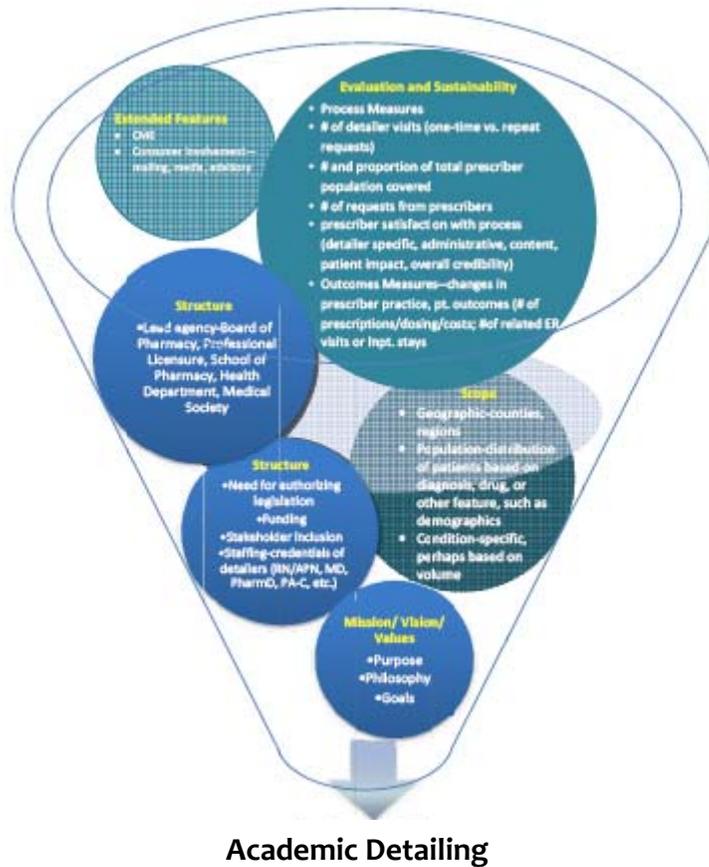
Recommendations for future research included consideration of the most effective type of messaging—persuasion, informational, or skill-building; the need for more “head-to-head” research testing than EOV against “no intervention”; testing which type of “visitor” produced the best effects; and evaluation of process measures to test the extent to which intended implementation occurred. The authors suggested that less complex designs are needed because many studies have too many steps or complex behavioral targets to discern impact of the intervention being studied. The authors stated that studies need to be designed so that there is sufficient power to detect small effects, because many studies' outcomes showed small to moderate effects that could be missed without sufficient power. Along with the impact of interventions on prescriber behavior, patient outcomes and economic analyses are needed.



Consideration of a Maryland Pilot

Current models vary in nearly every aspect of the program, except for the impetus of needing to provide high-quality care in a cost-effective way. Each program is unique to the circumstances of its political, fiscal, and historical context. As such, the development of a pilot in Maryland has more to do with the feasibility of each option, singly and in combination, as it relates to the contextual expediency of the state and perspectives of stakeholders. The model below lists the potential decision points.

Figure 1. Components of an Academic Detailing Program



Mission and Visioning and the Underlying Philosophy

Establishing statements for the mission and vision of the program among key stakeholders would initially inform the development of a pilot by defining the nature of the content to be delivered to prescribers and, later, the criteria for evaluation. Is the objective to improve quality of care, reduce cost, or increase access? Although these are not unique factors, and in fact, each impacts the other, messages focusing on any one of them would differ. The general philosophy is that AD, as the “anti-pharmaceutical detailing” solution, has no commercial or profit agenda and should primarily focus on quality of care and not cost, even though, in most cases, states have begun these programs due to concern over the high and rising cost of drugs. Access to medications is a critical factor in the treatment of some illness, so their high cost and unavailability for many Americans is a concern. Mere access to prescription drugs can be deemed an element of quality care when the right drug is provided for the right person at the right time. Evidence-based recommendations have demonstrated that cost can be reduced if quality principles are applied to medication prescribing. Under the high pressure of pharmaceutical detailing, quality is not always the driving factor in prescribing. Reduced use of public dollars in this case, especially, could free resources to treat more people, increasing access.

The mission and visioning outcomes would help identify which providers would be prioritized, so as not to create anxieties that certain individuals are targeted or that cost is the sole impetus. A study of drug utilization patterns answering the following questions could assist in this matter.

What drugs/drug classes have the highest frequency of use?

What drugs/drug classes have the greatest cost?

What illness conditions have the clearest and accepted standards of care?

What illness conditions have the most easily measured treatment outcomes to evaluate the impact of AD?

Is there a geographic pattern to the utilization of any high-cost and/or highly used drug/drug class that might direct the prioritization of a particular drug/drug class or condition for AD?

Structure

The implementing agency must have the authority to gather stakeholders and promulgate regulations. In most instances, with the exception of Pennsylvania, AD programs were initiated via legislative mandate to a state health department, but were rarely implemented by the health department itself. In the case of Pennsylvania, legislation was felt to be unnecessary, largely



The Hilltop Institute

because a state agency (the Department of Aging) historically had authority of 25 years' duration to implement programs to provide medications to the elderly and had the economic means, as well. Selecting an agency to implement the program requires broad authority to induce cooperation from prescribers. Schools of pharmacy have to be careful that individuals involved in an AD program administered under its authority are not receiving funding from commercial pharmaceutical interests, which could undermine the program's credibility. The amount of funds directly dictates the scope and scale of the program or pilot. Research has demonstrated savings from changing prescribing patterns to lower-cost drugs that are as efficacious as higher-cost alternatives and that this change leads to savings that pay for the cost of AD. However, it has not been shown that the cost savings persists over time once initial savings are realized. Program costs vary by the model depending on the number and type of detailers hired and the costs of training and acquiring the core content of the educational materials/content. Table 1 lists the average annual wages for types of health professionals currently being used to conduct AD. The scale and scope of a pilot/program rests on the available resources and data analysis to determine how the desired impact can be demonstrated given the limitations of resources. A large program with a higher number of less-qualified detailers is not preferable to a smaller program that takes into account the need for provider acceptance of highly qualified detailers with credible information.

Staffing: The models considered in this report utilize registered nurses, advanced practice nurses (Washington, D.C.), physicians (Washington, D.C.), physician assistants (Maine), pharmacists (South Carolina), and Pharm.D.s (New York). The general advice for the credentials of the academic detailer is that the person is knowledgeable about the presented drugs/condition and is an individual that physicians, as a particular kind of prescriber, will accept as a credible source of information. It was stressed, however, by a Pennsylvania contact for this report, that the source of the information (in the Pennsylvania case, researchers and physicians from the Harvard Medical School) is the more important factor. The ratio of targeted prescriber to detailer was mentioned by one program as approximately 1 detailer to 150 prescribers. However, with repeat visits, occasionally more than one prescriber per visit, and varying amounts of time spent in travel, and depending on the home location of the program, the prescriber, and the detailer, this varies. Some programs minimize travel time by assigning detailers to areas near their own homes. The more time spent traveling, the fewer prescribers a detailer can see. No program has enough detailers to provide visits to every prescriber in a state, so programs prioritize who they will visit.

Some of the decision regarding the type of credentials and number of detailers will depend on the available funding, as all of these categories have quite different salary requirements. Although the literature suggests that AD "pays for itself", in the short-term, through savings on lowering the use of expensive brand name drugs in exchange for equally effective and lower-cost generics or other drug alternatives, none suggests that the program can be scaled based on the assumption



that savings will remain even with expenses, regardless of the size of the program. Table 1 presents the average salary for individuals with these credentials.

Table 1. Average Annual Wage of Potential Academic Detailers

	Average Annual Salary (dollars)
Physicians	137,290 ¹
Physician’s Assistants	85,880 ¹
Registered Nurse	74,370 ¹
Advance Practice Nurse (nurse practitioner)	80,000 ²
Pharmacist/Pharm.D.	104,260 ¹

¹Source: Bureau of Labor Statistics (2008, May).

²Source: <http://www.nurse.net/cgi-bin/start.cgi/salary/index.html>

Involvement of stakeholders is critical to acceptance and success of the program. The literature and those interviewed emphasized the need for transparency and inclusion, especially of prescribers. Stakeholders include professionals involved in the provision of prescription drugs, and in the case of Maine, legislation includes “dispensers of pharmaceuticals” as individuals to receive AD. The Maine act also specifies that its program will be designed through consultation with “carriers and health plans, hospitals, pharmacy benefit managers, consumers, the MaineCare [Medicaid] Advisory Committee, and the MaineCare [Medicaid] drug utilization review committee...” Others have included the state medical society, schools of medicine and pharmacy, and pharmacy board. In Washington, D.C., the Board of Pharmacy and the Health Regulation and Licensing Administration, which oversees the AD program, have open meetings that are “always attended” by pharmaceutical industry representatives.

Scope

Population, geographic region, drug, or condition: Most programs, if not all, focus on publicly funded health care so that the prescribers of interest are those who are paid for using public funds. The general approach is to select a geographical area where a large proportion of the target population is treated. As such, those jurisdiction(s) where a preponderance of a given type of prescription is written or where a preponderance of patients with a particular diagnosis is treated would be selected. However, based on a particular diagnosis or prescription drug, higher proportions of the target population might reside elsewhere. Additionally, if the goal is to compare impact or utilization in different populations or to pilot a smaller, more manageable number of cases, then the largest number in a category might not be the deciding factor.



Cost Estimate

Appendix F contains details of an estimate for initiating a program. The assumptions include that the prescriber target is 1,000 individuals who will receive two in-person contacts each. These assumptions are established only for the purpose of scaling costs in this estimate and could be adjusted up or down. Academic programs' realities in regard to the location and existing infrastructure varies in terms of the number of visits per prescriber, distance traveled, and need for new infrastructure development (space, furnishings, equipment, administrative personnel, etc.).

An estimate of \$1.26 million would provide the basic infrastructure to reach the target of 1,000 prescribers.

Conclusion

At this point in time, it is not possible to identify a single best practice or “working” model. Each program now in place is unique in its scope, scale, and structure. Most programs are in early stages of implementation or just beginning to evaluate their effectiveness; generalizability or replicability is necessarily limited by the particular contextual factors of any given state and the nature of the program. There is, however, a list of options to consider, including guidance for the identification and analysis of the factors in Maryland that would help shape its approach if Maryland decided to implement an academic detailing program.



References

- Aaserud, M., Austvoll-Dahlgren, A., Sturm, H., Kösters, J.P., Hill, S., Furberg, C., et al. (2006). Pharmaceutical policies: effects on rational drug use, an overview of 13 reviews (Protocol). *Cochrane Database of Systematic Reviews* 2006, 2, CD004397. Doi: 10.1002/14651858.CD004397.pub2
- Allen, M. (2006, April 4). *Canadian Academic Detailing Collaboration*. Dalhousie University. Retrieved September 21, 2009, from http://www.cadth.ca/media/symposium_pdfs/cadth_symposiums06_ppt_Allen.pdf
- Allen, M. (2008, February 11). *Academic Detailing in Canada*. National Legislative Association on Prescription Drug Prices. Retrieved Sep 21, 2009, from www.reducedrugprices.org/av.asp?na=424
- Allen, M. (n.d.). *Academic Detailing Services*. Continuing Medical Education. Retrieved September 23, 2009, from Canada: <http://cme.medicine.dal.ca/ADS.htm>
- Allen, M. (n.d.). *MainPro-Maintenance of Proficiency*. The College of Family Physicians of Canada. Retrieved September 21, 2009, from <http://www.cfpc.ca/English/cfpc/cme/mainpro/maintenance%20of%20proficiency/default.asp?s=1>
- Allen, M., Ferrier, S., O'Connor, N., & Fleming, I. (2007). Family physicians' perceptions of academic detailing: A quantitative and qualitative study. *BMC Medical Education*, 7(36). Doi:10.1186/1472-6920-7-36
- Ball, S. (2009, February 23). *Academic Detailing in South Carolina: A Focus on Mental Health*. South Carolina College of Pharmacy. Retrieved September 22, 2009, from www.aacp.org/meetingsandevents/IMPresentation/Documents/Ball.pdf
- Beney, J., Bero, L., & Bond, C. M. (2000). Expanding the roles of outpatient pharmacists: Effects on health services utilization, costs, and patient outcomes. *Cochrane Database of Systematic Reviews*, 2, CD000336. Doi: 10.1002/14651858
- Bergman, D., Hoadley, J., Kaye, N., Crowley, J., & Hostetter, M. (2006, March). *Using Clinical Evidence to Manage Pharmacy Benefits: Experiences of Six States*. Publication #899. New York, NY: The Commonwealth Fund.
- Bloom, B. S. (2005). Effects of continuing medical education on improving physician clinical care and patient health: A review of systematic reviews. *Int J Technol Assess Health Care*, 21(3), 380-385.



- British Columbia Community Drug Program. (2009). Information about the British Columbia Community Drug Utilization Program's (CDUP) website. Retrieved September 23, 2009, from <http://www.cdup.org>
- Budgen, S., & MacNair, K. (2006). Deliverable #4: Impact Evaluation. *Academic Detailing Toolkit*, 105-131.
- Bureau of Labor Statistics. (2008, May). Occupational Employment Statistics: May 2008 Occupational Employment and Wage Estimates—Maryland. Retrieved October 25, 2009, from http://www.bls.gov/oes/2008/may/oes_md.htm#b29-0000
- Calgary Health Region. (2009). *Pharmacy Services: Academic Detailing*. Retrieved September 23, 2009, from http://www.calgaryhealthregion.ca/programs/pharmacy/academic_detailing.htm
- Coopers & Lybrand Consultants. Drug and Therapeutics Information Service: Update of the economic evaluation of the NSAID project (report) 1996 www.prescriptionproject.org/tools/solutions_reports/files/0010.pdf
- Delegate Hubbard, e. a. (2009, February 25). *Maryland General Assembly*. Department of Legislative Services. Retrieved September 18, 2009, from http://mlis.state.md.us/2009rs/fnotes/bil_0004/hb0574.pdf
- District of Columbia SafeRx Act of 2008 Pharmaceutical Detailers Amendment Act of 2008 Sec. 102. The District of Columbia Health Occupations Revisions Act of 1985, effective March 25, 1986 (D.C. Law 6-99; D.C. Official Code § 3-1201.01 *et seq*)
- Exhibit A in the matter of Warner-Lambert Company, LLC; Order Governing the Administration of Multistate Grant and Advertising Program, 04C14403 (Circuit Court of the State of Oregon, May 13, 2004).
- Fund, T. C. (2004, October). *The Commonwealth Fund Innovations*. Retrieved September 23, 2009, from <http://www.commonwealthfund.org/Content/Innovations/Tools/2004/Jul/Using-Evidence-Based-Medicine-to-Design-State-Drug-Programs.aspx>
- Fund, T. C. (2006, March). Washington State: An Integrated Approach to Evidence-Based Drug Purchasing. *A Private Foundation Working Toward a High Performance Health System*. New York, NY: The Commonwealth Fund.
- Gibson, M., & Santa, J. (2006). The Drug Effectiveness Review Project: An Important Step Forward. *Health Affairs —Web Exclusive, Perspectives*, W272-W275.



- Gorin, S. S., Ashford, A. R., Lantigua, R., Hossain, A., Desai, M., Troxel, A., et al. (2006). Effectiveness of academic detailing on breast cancer screening among primary care physicians in an underserved community. *Journal of the American Board of Family Medicine*, 19(2), 110-121.
- Hams, M. (2008, February 11). The Drug Effectiveness Review Project (DERP). *New England Academic Detailing Information Summit*. The Prescription Project. Retrieved September 21, 2009, from http://www.policychoices.org/academic_detailing_planning_initiative.shtml
- Hoadley, J., Crowley, J., Bergman, D., & Kaye, N. (2006, March). Understanding Key Features of the Drug Effectiveness Review Project (DERP) and Lessons for State Policy Makers. Washington, D.C.: National Academy for State Health Policy.
- Jackowski, L. (2009, October 30). The Alosa Foundation. (A. Snyder, Interviewer)
- Keiser, K., Kohl-Welles, J., & Murray, E. (2008, January 14). Senate Bill 6200 — An Act Relating to prescription drug marketing. Retrieved November 9, 2009, from <http://apps.leg.wa.gov/billinfo/summary.aspx?bill=6200&year=2008>
- Keys, P. W., Goetz, C. M., Keys, P. A., Sterchele, J. A., Snedden, T. M., & Livengood, B. H. (1995). Computer-guided academic detailing as part of a drug benefit program. *American Journal of Health System Pharmacists*, 52, 2199-2204.
- Little, A. (2008, July 11). Presentation by Oregon Health & Science University at the U.S. Cochrane Center Conference. *Priority Setting for Systematic Reviews: Drug Effectiveness Review Project*. Baltimore, MD.
- Maclean, C. (2008, February 11). *Vermont Academic Detailing Program*. University of Vermont College of Medicine. Retrieved September 21, 2009, from <http://www.docstoc.com/docs/5442007/Vermont-Academic-Detailing-Program>
- Maclean, C. (2008, March). *The Vermont Academic Detailing Program*. University of Vermont College of Medicine. Retrieved September 21, 2009, from <http://www.med.uvm.edu/AHEC/downloads/ADoverview2008.03.13.pdf>
- Manitoba Pharmacy Conference, *MSP Newsletter*. (2007, February 20). Retrieved September 23, 2009, from www.msp.mb.ca/newsletter/newsletter_5-5.htm
- Mason, J., Freemantle, N., Nazareth, I., Eccles, M., Haines, A., & Drummond, M. (2001). When is it cost-effective to change the behavior of health professionals? *Journal of the American Medical Association*, 286(23), 2988-2992.



- May, F. (2006, April 4). *Academic Detailing for better prescription drug use*. The Prescription Project. Retrieved September 21, 2009, from http://www.prescriptionproject.org/tools/conference_presentations/files/0006.ppt#256,2
- May, F. (n.d.). *Academic Detailing: A Spearhead for a Health Care Extension Service*. University of Kentucky. Retrieved September 22, 2009, from www.ahqa.org/pub/uploads/AGExtensionMay.ppt
- May, F., Hart, L., Rowett, D., & Perrier, D. (2009). Experience with academic detailing services for quality improvement in primary care practices. *Quality & Safety in Health Care*, 18(3), 225-231.
- May, F. (2008, February 11). PowerPoint presentation delivered in Concord, New Hampshire. *Academic Detailing in Australia*. Retrieved November 1, 2009, from <http://www.policychoices.org/documents/ADinAustraliaFeb08FINALFROMFRANK.pdf>
- Monane, M., Matthias, D. M., Nage, B. A., & Kelly, M. A. (1998). Improving prescribing patterns for the elderly through online drug utilization review intervention. *Journal of the American Medical Association*, 280(14), 1249-1253.
- Neumann, P. J. (2006, June 6). Emerging lessons from the Drug Effectiveness Review Project. *Health Affairs*. Retrieved October 25, 2009, from <http://content.healthaffairs.org/cgi/content/full/hlthaff.25.w262v1/DC1>
- Newland, J. A. (2006, May). 2006 Nurse Practitioner Salary and Practice Survey. *The Nurse Practitioner: The American Journal of Primary Health Care*, 31(5), 39-43.
- O'Brien, M. A., Rogers, S., Jamtvedt, G., Odgaard-Jensen, J., Iristoffersen, D. T., Forsetlund, L., et al. (2009). Educational outreach visits: Effects on professional practice and health care outcomes. *Cochrane Database of Systematic Reviews 2007*, CD000409. Retrieved October 25, 2009, from http://www.ncbi.nlm.nih.gov/pubmed/17943742?ordinalpos=2&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum
- Office of Financial Management State of Washington. (n.d.). *Fiscal Notes: 2008 6200 SB—Prescription Drug Program*. Office of Financial Management State of Washington. Retrieved September 22, 2009, from <https://fortress.wa.gov/ofm/fnspublic/legsearch.asp?BillNumber=6200&SessionNumber=60>



- Ostini, R., Hegney, D., Jackson, C., Williamson, M., Mackson, J. M., Gurman, K., et al. (2009). Systematic review of interventions to improve prescribing. *The Annals of Pharmacotherapy*, 43, 502-513.
- PACE. (2009, September 17). *About Academic Detailing*. Retrieved September 17, 2009, from <http://www.rxfacts.org/detailing.php>
- Padrez, R., Carino, T., Blum, J., Mendelson, D., & Health Strategies Consultancy, LLC, (2005, May). *The Use of Oregon's Evidenced-Based Reviews for Medicaid Pharmacy Policies: Experiences in Four States*. Kaiser Commission on Medicaid and the Uninsured. Washington, D.C.: Henry J. Kaiser Family Foundation.
- Pharmaceutical Research and Manufacturers Association of America, Civil Action No. 1:07-cv-220 (United States District Court for the District of Vermont July 9, 2008).
- Philippon, D. (n.d.). *Alberta Drug Utilization Program*. University of Alberta. Retrieved September 21, 2009, from <http://www.uofaweb.ualberta.ca/adup/>
- PPC. (2009, September 18). *Prescription Policy Choices*. Retrieved March 23, 2009, from <http://www.policychoices.org/>
- Pugh, E. A. (2009, February 26). *Maryland General Assembly*. Department of Legislative Services. Retrieved September 18, 2009, from http://mlis.state.md.us/2009rs/fnotes/bil_0008/sb0708.pdf
- Reck, J. L. (2008, February 11). *Summit, New England Academic Detailing Information*. Concord, NH: National Legislative Association on Prescription Drug Prices.
- Reck, J. L. (2008, November 11). *A Tri-State Academic Detailing Collaborative*. 2008 International Symposium on Pharmaceuticals. Retrieved September 21, 2009, from <http://www.mainebenzo.org/2008conference.htm>
- Reeve, J. F., Rumble, R. H., & Jaffrey, R. (1999). Programme to improve the use of drugs in older people and involve general practitioners in community education. *Journal of Clinical Pharmacy and Therapeutics*, 24(4), 289-297.
- Rowett, D. (2001, November 5). *RGH Pharmacy E-Bulletin*. Pharmacy Department of the Repatriation General Hospital. Retrieved September 24, 2009, from www.auspharmlist.net.au/ebulletin/vol03/eb3-11.doc



- Saskatchewan RxFiles. (2008). *RxFiles Academic Detailing Program*. Retrieved September 23, 2009, from <http://www.rxfiles.ca/rxfiles/uploads/documents/website-links-saskatchewan.pdf>
- Saskatchewan RxFiles Academic Detailing Program. (2009). *RxFiles: Frequently Asked Questions*. Retrieved September 21, 2009, from <http://www.rxfiles.ca/rxfiles/modules/faq/faq.aspx>
- Seager, J., Howell-Jones, R. S., Dunstan, F. D., Lewis, M. A., Richmond, S., & Thomas, D. W. (2006). A randomised controlled trial of clinical outreach education to rationalise antibiotic prescribing for acute dental pain in the primary care setting. *British Dental Journal*, 201(4), 217-222.
- Simon, S. R., Majumdar, S. R., Prosser, L. A., Salem-Schatz, S., Warner, C., Kleinman, K., et al. (2005). Group versus individual academic detailing to improve the use of antihypertensive medications in primary care: A cluster-randomized controlled trial. *The American Journal of Medicine*, 118(5), 521-528.
- Snedden, T. (2009, October 20). Chief for Research and Evaluation, PACE Program, PA Department of Aging. (A. Snyder, Interviewer)
- Soumerai, S. B., & Avorn, J. (1986). Economic and policy analysis of university-based drug detailing. *Med Care*, 24(4), 313-331.
- Soumerai, S., & Avorn, J. (1990). Principles of educational outreach (“academic detailing”) to improve clinical decision making. *Journal of the American Medical Association*, 263(4), 549-556.
- Soumerai, S., McLaughlin, T. J., & Avorn, J. (1989). Improving drug prescribing in primary care: A critical analysis of the experimental literature. *The Millbank Quarterly*, 67(2), 268-317.
- South Carolina College of Pharmacy. (2009). *What is SCORxE?* Retrieved September 22, 2009, from <http://www.sccp.edu/centers/SCORxE/index.aspx>
- Sturm, H., Austoll-Dahlgren, A., Aaseru, M., Oxman, A. D., Korsters, J. P., Ramsay, C., et al. (2007). *Pharmaceutical policies: Effects of financial incentives for prescribers*. *Cochrane Database of Systematic Reviews*, 3, CD006731.
- Sullivan, T. (2009). Protecting Americans from Drug Marketing Act—Who Will Protect Us from the Politicians? *Policy and Medicine*. Retrieved October 27, 2009, from <http://www.policymed.com/>



The Consumer and Prescriber Grant Program. (n.d.). Retrieved October 25, 2009, from <http://www.consumerprescribergrantprogram.org/prescriber.htm>

The State of Vermont Legislature. (2008). *No. 80 An Act Relating to Increasing Transparency of Prescription Drug Pricing and Information*. Retrieved September 21, 2009, from <http://www.leg.state.vt.us/docs/legdoc.cfm?URL=/docs/2008/acts/ACT090.htm>

Valenti, W. M., & Voisine, R. (2008). Academic detailing: Questions and answers. *Managing Managed Care*, 18, 83-85.

Zillich, A. J., Ackerman, R. T., Stump, T. E., Ambuehl, R. J., Downs, S. N., Homes, A. M., et al. (2008). An evaluation of educational outreach to improve evidence-based prescribing in Medicaid: A cautionary tale. *Journal of Evaluating in Clinical Practice*, 14, 854-860.

Zunker, R. J., & Carlson, D. L. (2000). Economics of using pharmacists as advisers to physicians in risk-sharing contracts. *American Journal of Health-System Pharmacies*, 57, 753-755.



Appendix A. Academic Detailing/Prescriber Education Outreach Programs

Program	Agency	Drugs/ Therapeutic Classes/Conditions	Description of Initiative	Marketing Strategy
Vermont AD Program ³		Antibiotics	<p>AD sessions with 9 practices</p> <p>385 FP and IM providers, 48/192 practices visited</p> <p>Office Microsystems approach: wall posters, patient handout during rooming, viral prescription pad</p> <p>Formula for success: longstanding consensus, readiness and awareness, thirst for implementation strategies</p>	<p>Epocrates Pro gift certificate</p> <p>Breakfast or lunch</p> <p>CE credits planned for 2008</p>
Massachusetts e-Prescribing Program ⁶			<p><i>Electronic Prescribing Education: How to Improve Medication Safety and Reduce Drug Costs Through ePrescribing</i> is jointly sponsored by the Massachusetts Medical Society and its Committee on Information Technology and Blue Cross Blue Shield of Massachusetts in collaboration with the eRX Collaborative and the eRx Forum, a committee of ePrescribing stakeholders facilitated by the Massachusetts Health Data Consortium. This online education program, presented in a slide format, will give participants an overview of ePrescribing, legal and risk management issues, and barriers to implementation and adoption. The course will</p>	



Program	Agency	Drugs/ Therapeutic Classes/Conditions	Description of Initiative	Marketing Strategy
			<p>also address strategies for a successful implementation in the practice environment. Evidence-based data will show the link between patient safety and the use of ePrescribing. The online learning activity slides are designed to advance learning and understanding by starting with a broad overview of ePrescribing and then progressing to a more narrow focus on specific strategies each physician can use for a successful implementation in their practice and develop technical competency.</p>	
<p>Canadian Academic Detailing Collaboration (CADC)¹</p>	<p>Dalhousie Office of Continuing Medical Education (controls content)</p> <p>Nova Scotia Department of Health (funding)</p>		<p>Continuing Medical Education (CME) is a requirement for all full- and part-time practicing physicians in Canada. Academic Detailing is a form of CME, for which physicians earn credits, and can be scheduled around a time/place convenient for physicians. Participation in CADC is free and voluntary.</p> <p>Trained health care professional provides evidence-based information on therapeutic choices to physicians in one-on-one or small group visits.</p> <p>CADC can effectively influence the practices of health professional or prescribing practices of physicians in particular, as long as the material is insightful and balanced, detailers are trained and updated, and barriers to prescribing behavior</p>	<p>Mainpro (Maintenance of Proficiency) credits offered, required for all full- and part-time practicing members of CFPC (The College of Family Physicians of Canada)</p> <p>Program is highly valued for its evidence-based approach</p>



Program	Agency	Drugs/ Therapeutic Classes/Conditions	Description of Initiative	Marketing Strategy
			<p>changes are addressed.</p> <p>Factors most encouraged physicians to use AD: topic selected, evidence-based approach, handout materials. Factors most discouraged physicians to use AD: spending office time doing CME, scheduling time to see an AD, and having CME provided by a non-physician.</p>	
<p>Drug and Therapeutics Information Service (DATIS) Academic Detailing⁵</p>		<p>Asthma management</p> <p>Dyslipidemia</p> <p>Type 2 diabetes</p> <p>Hypertension</p> <p>Osteoporosis</p> <p>Depression</p> <p>Hormone replacement therapy</p> <p>Pain management</p> <p>Antibiotic</p> <p>ACE inhibitor</p>	<p>Local primary care ownership and engagement in the process</p> <p>Focuses on primary care physicians</p> <p>Fierce independence from bias</p> <p>Solid scientific basis</p> <p>Mutual embrace of uncertainties inherent in primary care practice</p> <p>Personalized service and confidentiality</p> <p>Focus on best outcomes for individual patients from better risk/benefit management</p> <p>PROCESS: Initial contact from locally respected primary care practitioners, with faxback</p> <p>Follow-up phone call</p>	<p>Success of service:</p> <p>Social marketing for individual physician behavior change</p> <p>Trained locally situated facilitators with practice knowledge and experience</p> <p>Supporting and spearheading other trusted CME initiatives</p> <p>Offices/staff geographically dispersed, offering services to each physician practice in a region</p>



Program	Agency	Drugs/ Therapeutic Classes/Conditions	Description of Initiative	Marketing Strategy
		NSAID therapies	<p>Second follow-up letter with faxback and subsequent follow-up phone call</p> <p>First and then subsequent visits to individual practices, receptionist and office manager</p> <p>Introductory letters from specifically respected colleagues by mail and hand</p> <p>Personal phone calls from respected colleagues advocating trial of service</p> <p>Individualized approach to each practice setting after the second follow-up letter</p>	
National Prescribing Services (NPS) Academic Detailing ⁴	Australian Federal Government		Includes face-to-face encounters as well as between-encounter support services. It is independent from biasing influences, the academic detailers are trained in communication skills and topic knowledge and clinical interpretation skills, print materials are provided that support communication, and there is no primary pursuit of dichotomous outcomes (buy or no-buy)	



Program	Agency	Drugs/ Therapeutic Classes/Conditions	Description of Initiative	Marketing Strategy
SCORxE ^{2,7}	South Carolina College of Pharmacy (SCCP) and South Carolina Department of Health and Human Services (SCDHHS)	Mental health disorders, HIV/AIDS, Cancer First topic: schizophrenia and depression in adults	“Clinical providers meet face-to-face with providers to offer them unbiased, evidence-based clinical information about drug therapy and best practices that will assist with making best prescription decisions” (http://www.sccp.sc.edu) Serves the South Carolina Medicaid population	Step 1: Build relationships with both primary care physicians and psychiatrists on relevant mental health topics. Step 2: Mail letters to introduce program

Academic Detailing Service. (n.d.). Dalhousie University: Faculty of Medicine. Retrieved October 7, 2009, from <http://cme.medicine.dal.ca/ADS.htm>

Ball, S. (2009, February 23). *Academic Detailing in South Carolina: A Focus on Mental Health.* South Carolina College of Pharmacy. Retrieved September 22, 2009, from www.aacp.org/meetingsandevents/IMPresentation/Documents/Ball.pdf

Maclean, C. (2008, February 11). *Vermont Academic Detailing Program.* University of Vermont College of Medicine. Retrieved September 21, 2009, from <http://www.docstoc.com/docs/5442007/Vermont-Academic-Detailing-Program>

May, F. (2006, April 04). *Academic Detailing for better prescription drug use.* The Prescription Project. Retrieved September 21, 2009, from [http://www.prescriptionproject.org/tools/conference_presentations/files/0006.ppt#256,2,Righting the script: improving prescription drug policy in an era of health reform](http://www.prescriptionproject.org/tools/conference_presentations/files/0006.ppt#256,2,Righting%20the%20script%3A%20improving%20prescription%20drug%20policy%20in%20an%20era%20of%20health%20reform) Evidence and Oversight: Approaches toward better pharmaceutical policy

May, F. (n.d.). *Academic Detailing: A Spearhead for a Health Care Extension Service.* University of Kentucky. Retrieved September 22, 2009, from www.ahqa.org/pub/uploads/AGExtensionMay.ppt

Online Continuing Education. (2008, February 15). Massachusetts Medical Society. Retrieved October 7, 2009, from http://www.massmed.org/Content/NavigationMenu2/ContinuingEducationEvents/NewCourses/ElectronicPrescribingEducation/ePrescribingEducation.htm#General_Information

What is SCORxE? (n.d.). South Carolina College of Pharmacy. Retrieved September 22, 2009, from <http://www.sccp.edu/centers/SCORxE/index.aspx>



Appendix B. State Prescriber Education Program (updated September 2009)

State	Structure	Topics	Budget
Maine (since 2009)	2007 legislation mandated DHHS establish a program; DHHS has contracted with the Maine Medical Association and GHS Data Management; the MMA is subcontracting with the Independent Drug Information Service (iDiS) for training and materials; 2 detailers (both P.A.s)	Type 2 diabetes, antiplatelet therapy	The budget for 2009 is approximately \$150,000, raised from fees of \$1,000 assessed on pharmaceutical manufacturers and labelers who market their products in the state of Maine (small, one-product companies are excluded from fee). http://www.mainemed.com/academic/index.php
Vermont (since 1999)	The Dept. of Health directs the program in collaboration with the AG, the University of VT AHEC program, and Office of Vermont Health Access; recently expanded from 2 to 4 detailers (Pharm.D. and M.D.)	Insomnia, depression, hypertension, cholesterol, heartburn	2007 legislation enables Vermont to assess a 0.5% fee on what the Office of Vermont Health Access spends on each manufacturer's or labeler's products. \$200,000 of these fees is directed toward academic detailing. (PhRMA filed an unsuccessful challenge to this fee in 2007. In 2009, a Vermont District Court upheld the law, enabling Vermont to collect the fee.) http://www.med.uvm.edu/ahec/TB1+BL.asp?SiteAreaID=290
Massachusetts (since 2009)	The Dept. of Public Health directs the program in cooperation with Commonwealth Medicine; contracts with the Independent Drug Information Service (iDiS); 2 detailers (B.S.N./M.P.H., M.D./M.P.H.)	Type 2 diabetes	Massachusetts passed legislation on academic detailing in 2008, appropriating \$500,000 from its general fund, which was later cut to \$200,000 due to budget constraints.
New York (since 2008)	Department of Health directs the program in cooperation with the State University of New York (SUNY) and the Univ. of Massachusetts Medical School; contracts with the Independent Drug Information Service; 20 detailers / 8 FTEs (Pharm.D.s)	Antibiotics, antipsychotics, hypertension	Supported by general funds offset by booked savings http://www.nyhealth.gov/health_care/medicaid/program/prescriber_education/presceducationprog

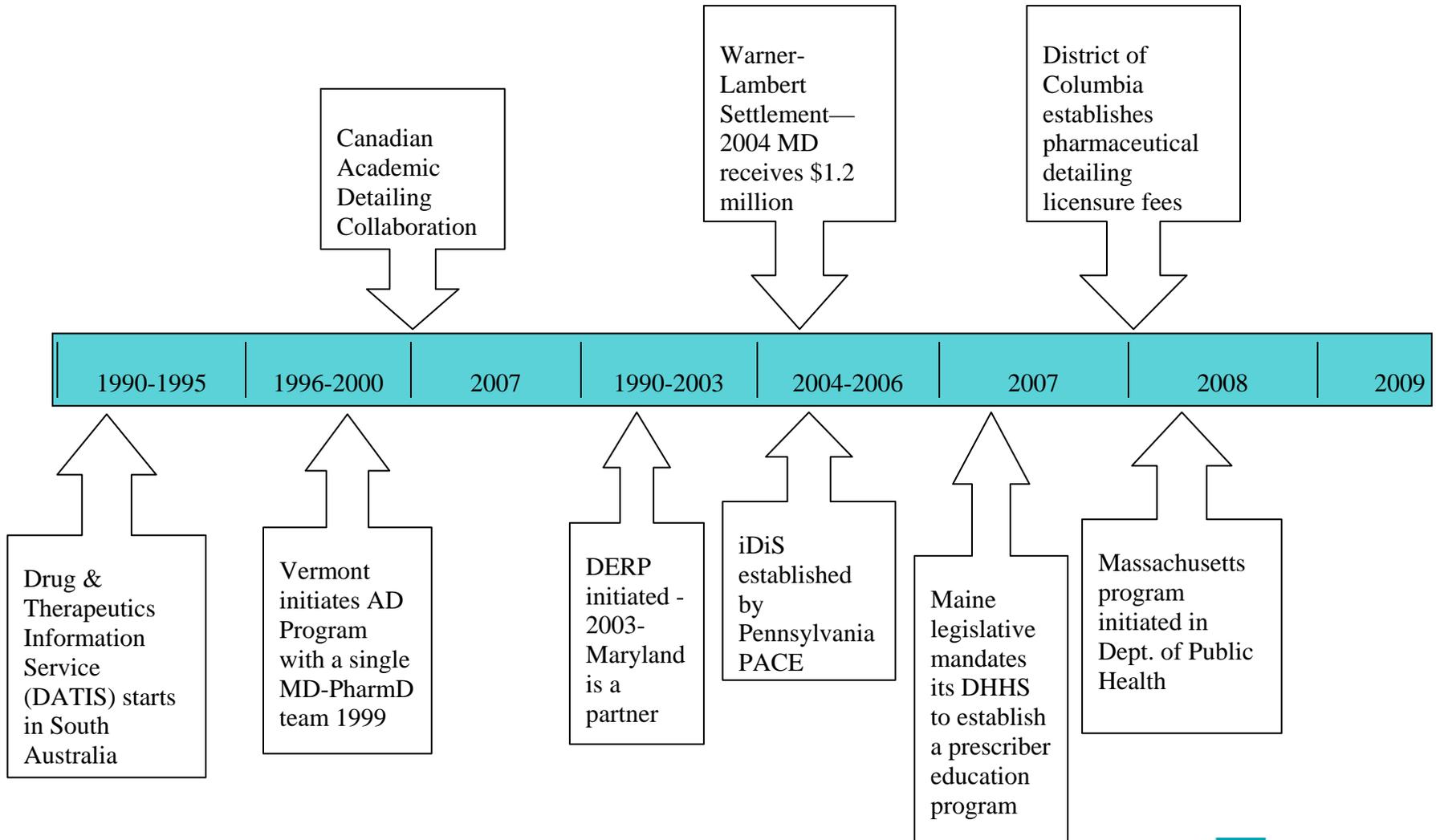


State	Structure	Topics	Budget
Washington, DC (since 2009)	Department of Health is contracting with the Independent Drug Information Service; 2 detailers (R.N./B.S.N., M.D./M.P.H.)	Type 2 diabetes	2008 legislation allocated \$500,000 from the general fund for implementation of SafeRx, of which approximately \$450,000 is dedicated for academic detailing.
Pennsylvania (since 2005)	Pennsylvania's drug assistance program (PACE) contracts with the Independent Drug Information Service (this is the original state contract for academic detailing with iDiS); 11 detailers / 6.5 FTEs (R.N., B.S.N., Pharm.D., M.S., M.B.A.)	Pain management, upper GI symptom treatments, anticoagulants, lipid-lowering therapies, and blood pressure medication.	Pennsylvania's drug assistance program (PACE) supports its academic detailing program with a budget of \$1 million a year financed through state lottery funds (not statutory). The development of the program was supported in part with funds from a multi-state settlement with a pharmaceutical manufacturer (Neurontin Consumer and Prescriber grant program). www.rxfacts.org
South Carolina (since 2007)	South Carolina Medicaid program contracts with Univ. of South Carolina School of Pharmacy; 5 detailers / 3 FTEs (Pharm.D. and R.Ph.)	Mental health focused (antipsychotic, antidepressant, and mood stabilizers)	Supported by a Medicaid grant of approximately \$1 million a year.
Idaho (since 2009)	Focus is on clinicians serving large proportions of Medicaid patients; 3 detailers (Pharm.D., R.Ph.)	Mental health drugs	This grant-funded pilot operates on a budget of \$50,000, which includes funding through Medicaid match.
Oregon (since 2009)	Focus is on clinicians serving large proportions of Medicaid patients; 3 detailers (Pharm.D., R.Ph.)	Mental health drugs	This grant-funded pilot operates on a budget of \$50,000, which includes funding through Medicaid match.
New Hampshire	2008 enabling legislation empowered the New Hampshire Medical Society to spearhead the program in conjunction with the AHECs under the direction of DHHS		No state funds were allocated to support the program; NHMS is exploring potential funding mechanisms

Source: Prescription Policy Choices, Retrieved October 4, 2009, from <http://www.policychoices.org/documents/StatePrescriberEducationPrograms0909.pdf>



Appendix C. A Prescriber Education/Academic Detailing Timeline



Appendix D. Software Used in Academic Detailing

Most studies that looked at academic detailing used basic statistical packages like SPSS, Minitab, and SAS. The following software programs were used by a very small number of studies.

QSR NUD*IST 6

The goal of this study was to explore family physicians' perceptions of academic detailing and the factors that affect their use of it. Semistructured telephone interviews were used to collect data on physicians. These interviews were tape recorded and transcribed, and a thematic content analysis was conducted. The program QSR NUD*IST 6 was used for data management.¹

QSR NUD*IST 6 (QSR N6)

A software package for qualitative analysis was released in 2002 by QSR International. It is the predecessor of Nvivo 8. As QSR N6 is out of date, pricing is not available. However, as Nvivo 8 is the latest version of this software, pricing for this program is relevant. A full license of Nvivo8 costs \$595.00, with percentage discounts as the number of licenses purchased increases.²

ACS Heritage Information Systems' Cyberformance

The Academic Detailing Medicaid programs in Idaho and Florida use the ACS Heritage Information Systems' Cyberformance software program. This program is a clinical rules engine that overlays the current Idaho Medicaid MMIS system. It allows Medicaid to generate reports that compare a given clinical indicator with individual patients' drug therapy and identify clinical outliers. It also provides tools to conduct detailing business analysis of utilization and cost trends. If needed, Medicaid will be able to print drug profiles for prescribers that show complete drug history, including multiple pharmacies and physicians.³

Cyberformance produces critical business, trend, and clinical reports with a few clicks of a mouse. This allows health plan administrators to simply and quickly monitor and manage health care programs and identify care management or quality improvement issues that are the most critical to the overall success of the program. Specific situations that represent the greatest opportunity for clinical or economic improvement can easily be identified with this application. *Utilization Management:* Enables administrators to interactively view and study cost and utilization data. *Clinical Performance:* Provides a single source solution for conducting clinical analyses of drug therapy and disease states. With this information, the user can identify care management or quality improvement issues, progressing from a summary perspective to a group-level view, to a client-level view, and ultimately, to a claim-level view. *Web Ranking:* Provides a statistical breakdown of claims and profiles providers in network against established



quantitative metrics. The factors are weighted and totaled to determine a provider risk factor that enables administrators to determine whether to intervene with the provider.⁴

@ RISK

This software allows you to enter data into Excel and project risk factors, run probabilities from scenario analysis, and run cost-benefit analyses. It has been used by pharmaceutical companies and hospitals for new product analyses, research and development estimations, and disease infection estimations.⁵

PRO-DUR

Utah's Risk Assessment program used First Data Bank's software PRO-DUR, which issues automatic warnings of problematic prescriptions at community pharmacies.⁶

Ingenix's Episode Treatment Groupers

Utah's Risk Assessment program used Ingenix's Episode Treatment Groupers for estimates of intervention impact on Medicaid general population. This software was used to help evaluate measures including (1) ranking episodes of care for targeted populations by volume and cost; (2) patient risk profiles by demographics, type of aid categories, providers, and intervention areas; (3) provider profiles by specialty and geographic area; and (4) detailed comparative analyses of episode of care on selected intervention areas between the treatment and control groups as well as before and after the intervention.⁶

This software accepts health care claims and returns an Episode Treatment Group value, along with other information. The subsequent grouped data can then be used as input into other applications, such as measuring physician cost of care. ETG is a condition classification methodology that combines related services into a medically relevant and distinct unit describing a complete episode of care.⁷

MedQuery

This software was designed by and is used only by Aetna to head off medical errors. In order to benefit from this software, one must enroll in Aetna's program. This software converts member health data into practical, usable information and helps improve care and patient safety. Through the MedQuery program, data is analyzed and the resulting information gives physicians access to a broader view of a patient's clinical profile. On a weekly basis, this data is compared against thousands of evidence-based care guidelines. It can alert a physician when a necessary and prescribed medication has not been filled.^{8,9}



Software References

Allen, M., Ferrier, S., O'Connor, N., & Fleming, I. (2007). Family physicians' perceptions of academic detailing: a quantitative and qualitative study. *BMC Medical Education*. No. 6. (2002). Retrieved October 6, 2009, from http://www.qsrinternational.com/products_previous-products_n6.aspx

http://www.ncbi.nlm.nih.gov/sites/entrez?orig_db=PubMed&db=pubmed&cmd=Search&term=%22BMC%20medical%20education%22%5BJour%5D%20AND%207%5Bvolume%5D%20AND%2036%5Bpage%5D%20AND%202007%5Bpdat%5D

The Use of Academic Detailing to Improve Mental Health Medication Prescribing for Idaho Medicaid Participants. (2009). Retrieved October 6, 2009, from <http://www.healthandwelfare.idaho.gov/LinkClick.aspx?fileticket=J1SpCftjU64%3D&tabid=208&mid=1603>

Cyberformance. (n.d.). Retrieved October 6, 2009, from <http://www.acs-inc.com/informedhealth/cyberformance.asp>

@RISK 5.5. (n.d.). Retrieved October 6, 2009, from <http://www.palisade.com/risk/>

Hales, M. Developing a Utah Pharmacotherapy Risk Management System with an Electronic Surveillance Tool (Utah ePRM). Utah Department of Health. The State of Utah, Utah Department of Health, Division of Health Care Financing, October 2, 2006, http://www.volunteer-ehealth.org/frisse/docs/Medicaid/UT_2.pdf

Symmetry Episode Treatment Groups. (n.d.). Retrieved October 6, 2009, http://www.ingenix.com/content/attachments/Symmetry_EpisodeAttribution_WP_FINAL_112007.pdf

Aetna Program Has Helped Physicians over 350,000 Times; MedQuery Program Finds Care Improvement Opportunities Not Likely to Be Discovered From Paper Medical Records. (2005, March 31). Retrieved October 6, 2009, from http://findarticles.com/p/articles/mi_m0EIN/is_2005_March_31/ai_n13492913/

Aetna Targets Costs, Health Adds Programs to Court Clients, Builds Sales. (2004, June 20). Retrieved October 6, 2009, from http://www.activehealthmanagement.com/news/articles/Active_Health1.pdf



Appendix E. Grantees of the Consumers and Prescribers Program

Grantee	PI Name	Project
American Medical Association	Audiey C. Kao	<i>Sound Prescribing: A Lifelong Curriculum for Physicians</i> Educational curricula for prescribers - in web and didactic versions targeted to current and future prescribers in 4 sites nationally and evaluated longitudinally.
Brigham and Women's Hospital	Jerry Avorn	<i>Educational Outreach to Improve Prescribing</i> Educational curriculum, including academic detailing to inform faculty and students at Harvard Medical School.
Dartmouth College	Lisa Schwartz, Steven Woloshin	<i>Helping Physicians Critically Evaluate Drug Information: A Curriculum and Method for Enhancing Sensible Decision Making During Office Visits</i> Educational curriculum for prescribers and drug fact boxes that potentially will be disseminated by FDA.
Federation of State Medical Boards	Lisa Robin	<i>Online Prescriber Education Network</i> A web-based dissemination point for other grantees' curricula that will be offered to every state licensing boards' CME websites.
Georgetown University, Department of Physiology and Biophysics	Adriane Fugh-Berman	<i>The Marketing of Medicines: Development, Dissemination and Evaluation of a Critical Skills Curriculum for Prescribers</i> Create a website for educational curriculum for CME credit practicing physicians through Georgetown University's CME program; curriculum for residents at three D.C.-area medical schools and write four journal articles.
Harvard Pilgrim	Steven R. Simon	<i>Reducing Unnecessary Use of Heavily Marketed Medicines</i> Randomized Controlled Trial of electronic alerts on medical records.
Hektoen Institute for Medical Research/Cook County	Gordon Schiff	<i>Formulary Leverage Improved Prescribing</i> Educational curriculum for Cook County hospital formulary committees and medical students at University of Illinois (Chicago).
Kaiser Foundation Health Plan of Colorado	David Price	<i>Pharmaceuticals from Development to Practice: A Web-Based Educational Curriculum for Health Professionals</i> Educational curriculum aimed at Kaiser Permanente prescribers in Colorado region and potentially nationwide in the Kaiser system.
Lovelace Clinic Foundation	Eva Lydick	<i>Development, Evaluation and Dissemination of a Web-Based Curriculum on Pharmaceutical Regulations and Marketing</i> Educational curriculum for prescribers in the Lovelace Sandia Health System - placed in the CME mainstream through website.



Meyers Primary Care Institute	Jerry Gurwitz	<i>Educating Health Professionals About the Marketing of Medicines</i> Educational curriculum for current and future prescribers the northeast region of the U.S.
MGH Institute of Health Professions	Elissa Ladd	<i>There's No Such Thing as a Free Lunch...or Dinner: A Web-Based Pharmaceutical Practice Program for Advanced Practice Nurses</i> Educational curriculum for nurse practitioners nationwide.
National Center for Farmworker Health	Roberta Ryder	<i>Rx Savvy for Health Outcomes</i> Disseminating other grantee curriculum to farmworker health center prescribers.
Northeastern Ohio Universities	Clint Snyder	<i>Comprehensive Curriculum for Understanding the Interface of the Medical and Pharmaceutical Professions</i> Educational curriculum development for faculty and students at NEOUCOM.
Oregon Health Policy & Research	David Pass	<i>Improving Prescribing Practices Using Evidence-Based Curriculum</i> Curriculum development for prescribers in Oregon.
Portland VA Research Foundation	Stephanie Halvorson	<i>Marketing and Medicines</i> Educational curriculum for residents at OHSU/Portland.
University of California, San Francisco	Lisa Bero	<i>Design, Evaluation and Implementation of a Marketing of Medicines Curriculum for Health Professionals</i> Educational curriculum for prescribers at UCSF. Will work with Farmworkers to disseminate information.
University of Alabama at Birmingham	Maribel Salas	<i>Marketing of Medicines: Strategies and its Impact on Prescriber Behavior in the United States</i> Curriculum development for prescribers in the Southeast region.
University of Georgia School of Pharmacy	Randall Tackett	<i>Development and Dissemination of a Multimedia Critical Prescribing Skills Curriculum</i> Curriculum development for pharmacy students at the University of Georgia.
University of Kentucky	Paul Dassow	<i>Maximizing the Impact of a Critical Skills Curriculum for Prescribers</i> Curriculum development for prescribers at the University of Kentucky.
University of North Carolina, Chapel Hill	Sue Tolleson-Rinehart	<i>PEDS: Pediatric Education for Drug Safety, a UNC CERTS Safety Curriculum</i> Curriculum development around pediatric off-label use for prescribers, disseminated through AHRQ connections and nationally.



University of Vermont, Area Health Education Center	Richard Pinckney	<i>Program in Wise Prescribing</i> Curriculum development for AHEC dissemination.
University of Washington, School of Medicine	Linda Pinsky	<i>Drug Reps in the Attic: Smoking Out the Influences of the Pharmaceutical Industry on Providers' Prescribing Practices</i> Curriculum development for students, residents and doctors in the Seattle area.
University of Arkansas	Mark E. Helm	<i>Impacting Medication Prescribing for Arkansas Children Through Off-Label Education</i> Curriculum development and assessment of prescribing patterns in a peds Medicaid population in Arkansas.
University of Minnesota	Jon C. Schommer, Stephen W. Schondelmeyer	<i>Evaluation of Best Buy Outreach Project</i> Evaluating curriculum dissemination in Minnesota prescribing community.
Mount Sinai School of Medicine	Ethan A. Halm	<i>Data Smog and Marketing Fog: A Critical Skills Curriculum to Educate Health Professionals About Rational Prescribing</i> Curriculum development and dissemination in 13 New York and New Jersey hospitals.
Florida International University	David Cohen	<i>Critical Skills Curriculum on Psychotropic Medications for Social Workers</i> Curriculum development for psychotropic meds in peds for social workers.
Institute on Medicine as a Profession (IMAP)	David Rothman; Susan Chimonas	<i>Rational Prescribing in a World of Marketing: Educaing Providers and Organizations to Best Practices</i> Case studies at large institutions nationwide on best- practices in conflict of interest and rational prescribing methods. Dissemination of tool-kits for all institutions with best practices of methods.
Wake Forest School of Medicine	Curt Furberg	<i>Smart Prescribe: Development, Dissemination and Evaluation of a Critical Skills Curriculum for Rational Prescribing</i> Curriculum development for prescribers in the Wake Forest Medical Center - collaborating with other grantees and will disseminate nationwide through the Internet.



Appendix F. Cost Estimate for an Academic Detailing Program in Maryland

Estimated Cost for an Academic Detailing Program
(Assumptions: for 1,000 prescriber contacts)

ITEM	Comments			Estimated Annual Cost
Personnel (FTE)		FTE	Salary and benefits (30% fringe)	
	Detailers (1 per 150 prescribers)	6.7	\$100,000	\$670,000.00
	Administrator	1	\$80,000	\$80,000.00
	Administrative Assistant	1	\$50,000	\$50,000.00
Space	Rent for 4 offices (\$55/sq foot × 120 sq. ft. per office)			\$316,800.00
Utilities	4 multi-line office phones, 7 PDA/cell phones \$89/month \$200 to purchase each × 7			\$10,496.00
Hardware	laptops × 7 @\$600 each; desktop computer × 4 at \$400 each			\$5,800.00
Professional Fees	(nurses, physicians or Pharm.D.s) annual professional license fees @\$125/each × 7			\$875.00
Mileage	\$.55 x 40 miles per provider visit × 2,000 visits)			\$44,000.00
Furniture Rental	\$740/mo × 12			\$8,880.00
Equipment	Lease of photocopying machine			\$25,000.00
Printing	Brochures, reports, fact sheets			\$10,000
Alosa Foundation Training	Through the Alosa Foundation (initial and one update for 10 detailers [to allow for attrition] × \$2,500 each)			\$25,000.00
CME	\$50 × 500			\$25,000.00
Mailing	5 pieces per provider × 1,000 × \$0.44			\$2,200.00
Office Supplies	\$200 per staff member × 8.7			\$1,740.00
Internet	\$45/month			\$540.00
Total →				\$1,275,791.00

Notes: 1. Some of the costs above assume the start-up of a freestanding program. Some of the costs may be provided “in-kind” or at a reduced rate as a component of an existing organization, such as space, furniture, and administrative support. Likewise, some equipment and utility costs might be offset.

2. These costs do not include administration of the program by Alosa.



The Hilltop Institute



The Hilltop Institute

University of Maryland, Baltimore County
Sondheim Hall, 3rd Floor
1000 Hilltop Circle
Baltimore, MD 21250
410-455-6854
www.hilltopinstitute.org