

Final Report

**Reducing Pain Medication Deaths in Utah:
Physician Education and Practice Redesign**

By

HealthInsight

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I. INTERVENTION PLAN

1. Introduction

Of the 467 drug-related deaths in Utah in 2007, 317 (67%) were attributed to legal drugs, whether prescription or over-the-counter. The most common legally prescribable drugs involved in the deaths were opioid pain relievers, including methadone, morphine, oxycodone, hydrocodone, and fentanyl. In July 2007, the Utah State Legislature passed House Bill 137 appropriating funding for the Utah Department of Health (UDOH) to establish a program to reduce deaths and other harm from prescription opiates. The Prescription Pain Medication Program (PPMP) is being led by the Utah Department of Health in collaboration with the Utah Attorney General, the Labor Commission, and the Division of Occupational and Professional Licensure (DOPL).

The PPMP Steering Committee and work groups investigating this problem began a multi-pronged approach to reducing prescription pain drug-associated deaths in Utah. This approach included education strategies targeting patients, providers, and the public. The steering committee and subgroups created guidelines and educational materials in a toolbox of resources. *HealthInsight* focused only on the provider education component aspect of the project while using the materials provided by the larger group.

Despite previous education outreach efforts, nearly half of those who died had an active prescription for an opioid medication at the time of their death and 3/4 had a valid prescription less than a year old. These data show that the majority of people who died were not drug addicts with an illegal source of drugs or intending suicide, but were in the care of a physician when they died. A disproportionate number of this group (about half), were taking methadone, which possesses unique pharmacologic properties. A large number were taking benzodiazepines in combination with opioids, which together greatly increase the risk of sleep apnea. Surviving family members of many of the patients saw, but did not recognize danger signs early enough to easily prevent death if treated. This leads us to believe that the greatest impact on reducing deaths could be achieved by focusing on physician prescribers, to improve their knowledge of the most current prescribing recommendations for long-acting opioids, supported by strategies to implement process changes to educate their patients.

Preliminary analysis of 2008 data has shown a 12.6% decrease in unintentional prescription deaths. The decrease cannot be directly attributed to the provider education and “use only as directed” public education campaign but the trend is promising (especially since the provider education began half way through the year).

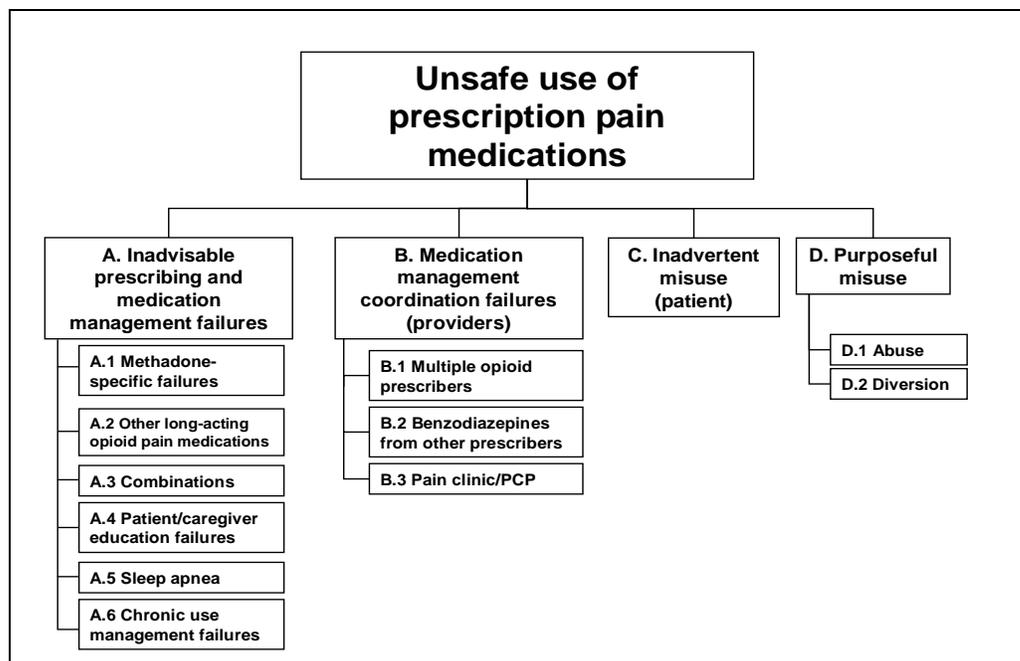
2. Background

The Nature and Types of Pain Medication Deaths in Utah

Analysis prepared for the steering committee provided critical insights into the causes of pain medication deaths. Figure 1 below provides a decision-based framework for categorizing and analyzing identified causes of unsafe pain medication use (e.g. the common pathways to preventable deaths). This analysis is not considered to be an exhaustive inventory of causes, but it does include the major types identified. The information was used to inform the development of an overall intervention strategy. Key observations include the wide range of causes identified, potential involvement of multiple decision-makers, motivations of particular actors, and system fragmentation/information management issues.

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Figure 1. Unsafe Pain Medication Use



Highlights of the analysis of causes include:

A. Inadvisable Prescribing and Medication Management Failures – Primary care and the fundamental challenges of primary care are prominently featured in this branch. The analysis available suggests primary care is a major source of unsafe pain medication use as a result of inadvisable prescribing practices and medication management failures. The practice of primary care is characterized by critical but low-frequency decisions, operating near the edge of expertise, and managing competing goals. These challenges are exacerbated, in this case, by changes in the principles and standards for pain control and the use of pain medications that have occurred since the original education and training for these providers. Beyond this, there are issues particular to:

1. **Methadone use for pain control** – converting from other (often more expensive) drug therapy regimens, managing pain during the transition, patient education, and provider knowledge/ mental models of pharmacokinetics and respiratory effects,
2. **Other long-acting opioid pain medications** – provider knowledge/ mental models of indications, contraindications, alternatives, signs of abuse and abuse potential, pharmacokinetics and respiratory effects,
3. **Opioids used in combination with other drugs** – interaction effects (primarily benzodiazepines, especially during sleep),
4. **Patient/caregiver education failures** – hazards and warning signs, assessing patient understanding, and anticipating potential problems,
5. **Sleep apnea** – assessment and monitoring, and
6. **Chronic use management failures** – monitoring.

B. Medication management coordination (between providers) – These failures are products of a fragmented health care delivery system wherein prescribers have incomplete information about the patient’s current medication regimen (specifically, medications prescribed by another provider). This regularly occurs during routine medical care and does not include “doctor shoppers”, which is

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covered in purposeful misuse (D.) below. A particularly troublesome problem is coordination of treatment strategies between primary care providers and pain management specialists.

C. *Inadvertent misuse (by the patient)* – These failures involve medications that were properly prescribed and dispensed, including the expected patient education processes, but were misused by the patient for pain relief. They can stem from flaws in the patient’s mental model of the therapeutic action and side effects of pain medications (e.g. created or not corrected through patient education), from mental lapses, or from cognitive function limitations.

D. *Purposeful misuse* – This category is distinguished by the intentions of the actors. Medications used in this manner may be obtained by manipulating prescribing or dispensing processes, medications may be stolen from another patient, or they may even have been originally obtained by the patient for a prescribed use.

While all categories of causes are considered to be material contributors to the overall pain medication-associated death rate observed in Utah, the largest contributors should be approached first. This means concentrating on provider education.

Intervention Strategy Considerations

This initiative faced substantial challenges. It sought to reduce pain medication-associated deaths while preserving safe access to indicated therapies. With primary care providers as a key target, it sought to engage time-pressured providers. The practices promoted are not being introduced into a vacuum – the initiative sought to displace providers’ clinical practices and the mental models formed through training and reinforced by their experiences. The practices themselves are subtle, requiring careful review and a mindful approach to application. Some in the target group were skeptical of the message because medical opinion on the management of chronic non-malignant pain has shifted radically over the past fifteen years. There also exist the confounding issues of mental health, addiction, and diversion.

Beyond these issues, the initiative had to anticipate the need to manage the gap between provider knowledge and the application of that knowledge in practice. Often in the clinical environment, provider knowledge alone is not enough to ensure that recommended practice is followed. Decision tools, process redesign, and/or patient education materials may be required to support reliable provider performance, to minimize disruption to efficient clinical operations, and to prepare patients for their role in safe pain medication use.

Recognition of these issues, review of the scientific literature on physician behavior change, and the broader body of knowledge on human factors psychology, suggests an intervention strategy that combines:

- Interactive face-to-face or small group learning experiences as the preferred venue for educational outreach and academic detailing,
- Support materials,
- Advice and specific best practices to follow in practice redesign, and
- Performance feedback, preferably at the individual provider level.

This strategy can be enhanced by using existing relationships between targeted providers and the outreach team, using reputable sources of information, maintaining flexibility in identifying, analyzing, and responding to provider concerns, and demonstrating respect for targeted providers.

In this project we were able to supply the first three but provider specific feedback was not directly available. Each presentation included data for the county in which it was being given and providers were encouraged to use the DOPL Controlled Substances Database (CSDB) to examine patterns of prescribing in their own patient population.

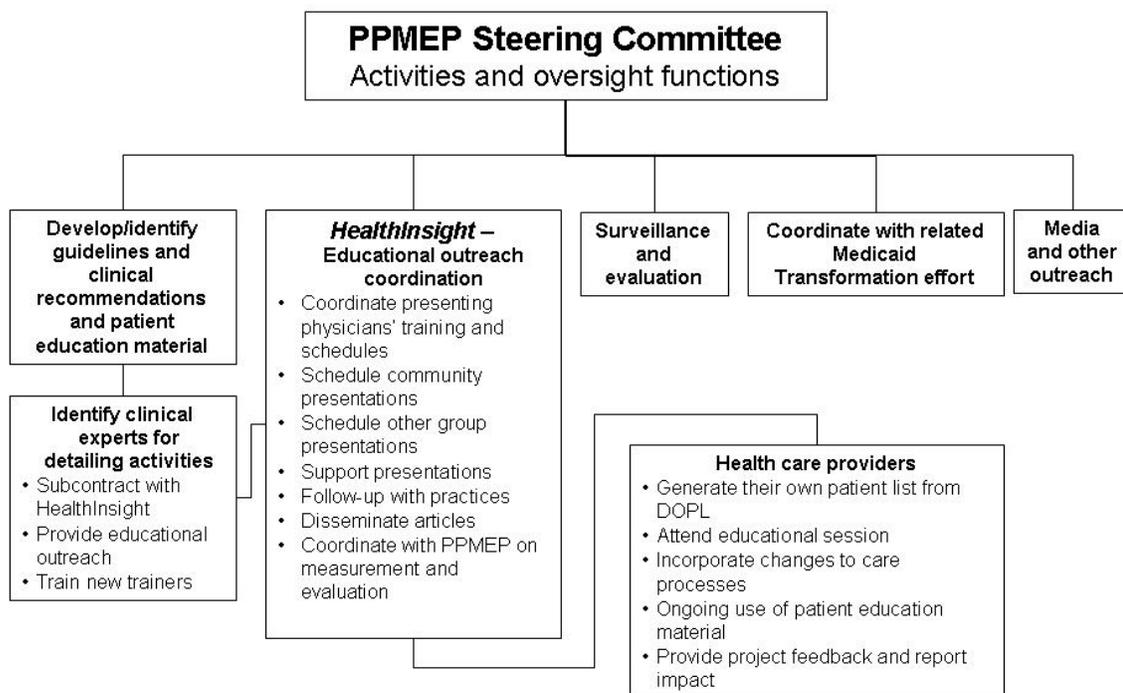
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3. Initiative Overview

This initiative is one activity conducted under the direction and authority of the PPMP Steering Committee. The key elements required for the initiative (see Figure 2) are:

- Developing clinical content and identifying content experts for outreach – both activities were directed by the steering committee, although the content experts were sub-contractors to the outreach coordination organization for their direct contribution to outreach activities; these activities included the development of guidelines and physician and patient education tools,
- Coordinating educational outreach– the entity responsible for this task, *HealthInsight*, was charged with connecting providers with the committee’s guidelines and recommendations, through educational sessions and other methods; *HealthInsight* staff also assisted physicians and their staff in developing care processes that incorporate the educational tools,
- Surveillance and evaluation of rates of death in Utah is a function of the steering committee and *HealthInsight* has and will continue to coordinate closely with them to use these data to measure the impact of the physician interventions,
- Coordinating with related Medicaid Transformation efforts may lead to additional avenues of education such as direct correspondence to providers with unusual or concerning prescribing patterns; our teams coordinated to target urban practices that were identified as being most in need of education, and
- Other committee outreach and education activities.

Figure 2. Initiative Overview



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4. Intervention Methods Detail

The intervention strategy combined interactive face-to-face or small group learning experiences (e.g. educational outreach and academic detailing), support materials, consulting in practice redesign, and performance feedback. Core intervention activities included meetings with primary care providers in 11 rural communities and 22 urban communities along the Wasatch Front, with supplemental activities including 17 presentations to larger physician audiences. We also partnered with Intermountain and University of Utah's physician education programs, and outreach activities involving pain specialists, and have had several articles published in physician newsletters.

Recruitment

Our strategy for recruiting participants and selecting venues and formats for the educational sessions required a balance between effectiveness and cost efficiency. In recruiting providers, we used our existing relationships with primary care practices and rural hospitals to schedule presentations during regularly scheduled physician meetings (either hospital-based community wide physician meetings or practice-based meetings in larger urban practices) when possible; this is the preferred venue for the educational sessions. Our previous experiences with physicians have shown that attendance is highest when the educational sessions are made a part of regularly scheduled physician meetings. After scheduling the meeting, customized mail, email and telephone invitations were sent to target physicians in the communities. The invitations included detailed instructions for accessing a list of their own patients on controlled substances from the DOPL CSDB and a request that they generate that list before the presentation.

A Performance Improvement CME program was offered to attendees of the rural and urban meetings. The credits were awarded (up to 20) to commensurate with the level of attendee participation and the program is ongoing as provider follow up continues. Below is an explanation of the three stages of the performance improvement program:

- **Stage A:** Access and use the DOPL Controlled Substances Database
 - Participants are asked to pull a controlled substance report for each database patient reported in the last six weeks, summarizing the information and bringing a copy of the summary to the presentation and discussion
 - Credits: up to five AMA PRA Category 1 Credits™ when providers participate in the activity and attend the presentation and question and answer session
- **Stage B:** Attend a community presentation
 - Participants were provided with an evidence-based educational packet for guided response and evaluation
 - Participants will be able to achieve five objectives
 - Participants will apply the practice guidelines into their practice
 - Credits: up to five AMA PRA Category 1 Credits™ by attending and agreeing to participate in one month and six month follow up evaluations; if providers elected to only attend the presentation and question and answer session, CME credits were awarded based on actual time engaged
- **Stage C:** Assessing prescribing habits and adopting the guidelines and recommendations
 - Participants assess changes in their prescribing patterns and in their office systems to support them.
 - Credits: up to five AMA PRA Category 1 Credits™
- » **Bonus:** An additional five AMA PRA Category 1 Credits™ are awarded to those who complete all three stages of the PI-CME.

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For the earliest sessions we strengthened our recruitment effort by telling sites that we will be getting their feedback on the materials to improve it for statewide distribution. We chose first phase recipients from the central area of the state, but also chose a few key practices from the Wasatch Front since rural sites have different needs than urban ones.

As an alternative venue to disseminate this project's message, additional meetings were scheduled as presentations at physician conferences or large physician groups (e.g. UMA Women's Conference, Salt Lake County Medical Society, Intermountain and University of Utah, described in Appendix B below). A select few of the meetings were videotaped and webcast to remote physician groups.

Interaction/Content Delivery Methods

The educational sessions were presented by a pain expert and/or a primary care provider. We attempted to schedule one pain expert and one primary care provider for each session, but found this is not always possible. After co-presenting a couple sessions speakers were occasionally scheduled to cover the whole presentation individually.

At the educational sessions we provide attendees with:

- Comparison data available on the practice, community, state or national level; including death rates,
- Guidelines and a tool box of resources including patient education forms (in draft form until February 2009),
- Advice on how to use the DOPL CSDB to identify problematic patients or their overall prescribing patterns, e.g.:
 - Identifying patients with possible unsafe combinations of medications,
 - Examining overall pattern of prescribing against "average" patterns,
 - Identifying patients for whom prescribing might be altered given the guidelines presented and calling them in for visits, adjusting treatment,
- Referral options for addicts, mentally ill and long term users,
- Information on how to access further assistance from *HealthInsight*,
- Offer access to peer experts for follow-up questions via email or telephone, and
- Opportunity to earn up to 20 AMA PRA Category 1 Credits™.

After the sessions providers were contacted to determine whether they have implemented systems changes or other improvement activities based on this topic (and the types and nature of these changes and activities); whether they have used the patient education materials and whether they have accessed and used the DOPL CSDB. The provider follow up continued through December 2009.

Individual practice level process redesign consultation, while very effective, is costly. We incorporated practice redesign concepts and specific instructions at the end of the clinical presentations with access to follow-up assistance via telephone. Each practice in the target communities were contacted one month after the presentation and surveyed to find out whether they have been able to access their patient list from DOPL and institute changes into their care processes. Clinical questions were referred to a physician expert, with additional follow-up contact given six months after the presentation to assess their continued use of suggested practices.

Feedback on the education sessions and materials was systematically collected and reviewed to improve the product. This is described in greater detail in Section II.3. below.

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Messages/Methods Particular to Identified Failure Modes

Primary care providers see many patients for pain issues. These visits are often time consuming and difficult to manage so we expected physicians to welcome information that will help them improve their ability to serve these patients. Four failure modes leading to unsafe medication use were identified in Figure 1 above. The educational intervention targeting primary care physicians focuses primarily on closing the gap between current recommendations and the providers' current knowledge (I.2.A.1.-7.). The process improvement interventions promote ways to implement the correct procedures into current processes of care (I.2.A.-C.). It is expected that physicians will also seek and appreciate advice on purposeful misuse (I.2.D.) so this will be a secondary objective in the project.

The initial analysis of the state level data suggested the following areas of primary focus in physician education:

- Using long-acting opioids in appropriate patients, understanding which patients are good candidates and which ones are at higher risk: patients with propensity to addiction, patients with mental illness, patients with acute pain problems, and patients who are recalcitrant to treatment or non-compliant,
- Understanding the special issues with methadone, this includes avoiding or cautiously interpreting narcotic dose conversion tables, starting "low and slow" with new methadone prescriptions, and covering chronic pain breakthroughs with short-acting drugs until methadone blood levels are stabilized,
- Avoiding use of benzodiazepines in combination with opioids, being aware that the combination may cause central apnea, which may not be heralded by the snoring of obstructive sleep apnea,
- Using sleep studies in patients on high doses of opioids or in patients with a predisposition to sleep apnea syndrome,
- Avoiding use of long-acting opioid formulations for acute post-operative or trauma-related pain, and
- Better educating patients and their families regarding the risks of long-acting opioids and signs of toxicity, including educating patients and families on the symptoms of overdose and the potential for emergency personnel to rapidly reverse opioid poisoning.

Secondary issues not directly connected with the increase in deaths include how to deal with drug seeking patients, preferred approaches to treating long-term chronic non-malignant pain, and drug diversion.

Materials supporting the educational sessions were created by the steering committee and its work groups and include physician guidelines and patient educational materials. The patient educational materials clearly state the risks of deviating from the instructions and the need to have space for the physician to write exact instructions. These are supplemented with materials such as a wallet sized card containing the pain agreement and patient education to show to other treating physicians.

The provider sessions and patient education material included education on the purpose of the DOPL CSDB and the requirement that a person's name and prescription be recorded in the database when the person fills a prescription for a schedule II, III, IV, or V controlled substance.

Supporting Education Dissemination Strategies

Statewide activities to support the core intervention were undertaken to increase the physician audience exposed to the education.

Four strategies used are:

1. **Intermountain Medical:** *HealthInsight* has many past experiences coordinating projects with Intermountain and our ability to do this is enhanced by Dr. Kim Bateman having been previously employed at various levels by Intermountain. We met with Intermountain physician leadership (Dr. Wayne Cannon, Director of Primary Care Clinical Programs, and Dr. Michael Marcum) at the onset of the project to influence them to include this in their provider education. Dr. Cannon agreed to

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focus on this area and included it in several mandatory physician meetings and regular physician leader talks. Intermountain has a long history of training their providers in quality improvement to activate change. Several well received presentations were given to Intermountain providers in the urban and rural targets, as well as regularly scheduled clinical learning sessions in the Intermountain central and urban regions.

2. **University of Utah:** Long standing relationship between *HealthInsight* and University of Utah physicians at many levels make it easy for us to engage their provider groups. We met with Dr. Julie Day, Medical Director of Quality for all University of Utah Community Clinics, who agreed to make this part of their educational efforts.
3. **Physician Meetings:** *HealthInsight* has a close relationship with the Utah Medical Association (UMA) who referred the organizers of several well attended annual physician meetings and conferences in Utah. This resulted in presentations conducted to 115 physicians at the UMA Women's Conference and Salt Lake County Medical Society annual meeting.
4. **Published Articles:** *HealthInsight's* regular monthly column in the UMA Bulletin was used to address this issue three times during the duration of the project, as well as a mention about the project with contact information in the June 2009 UMA Medibyte electronic newsletter. Articles were also published in the April 2009 Utah Academy of Physician Assistants newsletter, the June 2009 *HealthInsight* QualityInsight publication, and in the June 2009 Utah Academy of Family Practice Physicians Association newsletter. The publications were disseminated through their printed and email newsletters to their members.
5. **UMIA Program Collaboration:** One of our speakers, Dr. Patrice Hirning, is also the Medical Director of UMIA and a speaker at their opioid education meetings. We exchanged slides to coordinate our message at the onset of the project, but unfortunately for confidentiality reasons, they have been unwilling to identify the providers who attended their sessions.

UDOH Responsibilities

The Utah Department of Health (UDOH) and the PPMP Steering Committee were responsible for:

- Providing the guidelines, patient education forms, and other tools and resources used in the physician education component (guidelines were approved in February 2009),
- Assisting *HealthInsight* in identifying and recruiting physician expert speakers (June 2008),
- Working jointly with *HealthInsight* in finalizing the presentation materials; PPMP Steering Committee, Provider Behavior Change Work Group, and UDOH Public Information Officer approved the educational materials (July 2008),
- Review and editing of articles, and
- Meeting with *HealthInsight* analytical staff periodically to coordinate this project's measurement and evaluation with the overall project (June 2008, ongoing periodic).

HealthInsight Responsibilities

HealthInsight was responsible for:

- Initiating the CME program offered in the project; this included researching and implementing programs including the (up to 20) credits offered in the performance improvement program through the UMA, and the (up to 2.5) credits offered by the American Academy of Family Practice Physicians, and
- Contract deliverables – see Table 1 below:

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Table 1. HealthInsight Project Deliverable Detail

PPMP Project Deliverables	
1. Coordinate advertising; coordinate all advertising efforts for attendance to the presentation:	<ul style="list-style-type: none"> • Advertising materials developed at the onset of the project were continually updated to meet the participant expectations and needs of the program, • Meeting planners and invitees received advertising materials prior to the scheduled meeting, including: <ul style="list-style-type: none"> ▪ Meeting invitation including program objectives, speaker bios, speaker disclosures, ▪ Implementation Plan (program description including CME information), ▪ DOPL CSDB Activity; tutorial developed for obtaining access to the Controlled Substances Database, pull patient reports and recording findings, • Participants received information packets including the following information: <ul style="list-style-type: none"> ▪ Presentation slides, ▪ DOPL CSDB tutorial/activity, ▪ Program description, ▪ Brochures, bookmarks, ▪ Guidelines packet with various intervention tools, ▪ Other tools and resources not in the Guidelines packet, and ▪ Materials Order Form for additional supplies.
2. Coordinate Scheduling; responsible for all scheduling of community meetings including identifying primary and secondary phase target communities and providers:	<ul style="list-style-type: none"> • We targeted the central part of the state for the rural area recruitment, based on data indicating the areas with the highest need; the communities identified for Phase 1 and Phase 2 recruitment are: <ul style="list-style-type: none"> ▪ Phase 1: <ul style="list-style-type: none"> ▪ Emery-Carbon County: Castleview Hospital, ▪ Grand County: Allen Memorial Hospital, ▪ Juab County: Central Valley Medical Center, ▪ Millard County: Delta and Fillmore Community Medical Centers, ▪ Sanpete County: Gunnison and Sanpete Valley Hospitals, ▪ Sevier County: Sevier Valley Hospital, ▪ Phase 2: <ul style="list-style-type: none"> ▪ Duchesne County: Uintah Basin Medical Center, ▪ Tooele County: Mountain West Medical Center, ▪ Uintah and Daggett County: Ashley Valley Medical Center, ▪ Wasatch and Summit Counties: Heber Valley Medical Center, • The urban area recruitment was identified in various ways; <i>HealthInsight</i> used internal resources to produce a list of all primary care clinics in the urban areas, with the following methods were used to recruit these clinics: <ul style="list-style-type: none"> ▪ Blast emailing/faxing of program advertising materials, ▪ Phone calls to clinic managers and continued follow up, and ▪ Program and contact information put in various publications and on healthinsight.org and useonlyasdirected.org websites.

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PPMP Project Deliverables

3. Hire Sub-Contractors:

- a. Work with UDOH to identify and recruit peer experts
- b. Contact, hire, and monitor sub-contractors

- Collaboration with the UDOH and other organizations resulted in identifying and hiring peer experts to prepare and present a uniform message, the peer experts are as follows:

Kim A. Bateman, MD
 Susan Cochella, MD, MPH
 Robert F Finnegan, MD, DABPM
 Patrice F. Hirning, MD
 Lynn R. Webster, MD, FACPM, FASAM

4. Develop presentation:

- a. Work with a designated group of Prescription Pain Medication Program members to develop the presentation for physician meetings

- An outreach meeting was held on 6/03/08 to discuss the academic detailing of the presentation, those in attendance include:

Kim Bateman, Sharon Donnelly, Terri Rose (*HealthInsight*)
 Dr. Robert Rolfs, Erin Johnson (UDOH)
 Dr. Susan Cochella, Dr. Robert Finnegan, PPMP contracted speakers, and

- Members of the PPMP Steering Committee, along with the peer experts identified above created a Powerpoint presentation used in the meetings. It is a work in progress; continually updated with pertinent information to meet the needs of the audience. All of the speakers use the same presentation, which is in a consistent format using the “useonlyasdirected” logo. Frequent changes are made to the slide containing the county data, which is information specific to the audience.

5. Conduct 10 rural and 20 urban interactive, small-group learning experiences (with a target of at least six and no more than 12 participants). Include training on use of the DOPL CSDB, and individual follow-up to determine need for additional information and assistance. Follow-up telephone assistance will be provided as requested regarding practice redesign concepts.

- *HealthInsight* has scheduled the required number of learning sessions (see Appendix B below).

6. Supplement those smaller and more interactive learning experiences with statewide activities to support the core intervention, including:

- a. Partnering with Intermountain and the University of Utah provider education programs to include prescription pain medication management safety education in their provider education programs,
- b. Provide physician education in partnership with other physician meetings such as UMA, UMIA, Ogden Surgical-Medical Society, and
- c. Conduct a minimum of 12 large audience presentations (which may include grand rounds, telehealth for video presentations, and other large-audience venues). 6a and 6b may be counted toward this requirement.

- An outreach meeting was held 7/17/08 with pain experts from Intermountain, U of U, Lifetree Pain Clinic, Medicaid, who agreed to present a consistent message and support our efforts, those in attendance include:

Julie Day, University of Utah
 Wayne Cannon, Michael Marcum, Intermountain Healthcare
 Erin Johnson, Bob Rolfs, UDOH
 Kim Bateman, Sharon Donnelly, Terri Rose, *HealthInsight*
 Robert Finnegan, Health Clinics of Utah
 Lynn Webster, Lifetree Pain Clinic

- Physician education was provided in partnership with other physician meetings such as UMA Women’s Conference, Salt Lake County Medical Society, and various regularly scheduled hospital

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PPMP Project Deliverables

meetings and learning sessions (see Appendix B below), and

- We have conducted or scheduled a minimum of 12 large audience presentations (see Appendix B below).
- 7. Collect feedback on each presentation and modify the intervention as necessary:**
- a. Provider's opinion on presentation, materials, use of time, likelihood of changing behavior
 - b. Follow-up phone calls to providers (one month and six months after presentation or at end of project) to measure actual behavior change

- Of the 876 medical providers who attended the learning sessions, 307 are eligible to complete the 2nd Evaluation (those that attended the smaller, interactive learning sessions), and 134 have completed it, or 44%. Of the 134 participants that completed the 2nd Evaluation, 90 have completed the 3rd Evaluation, or 67%.
- We continually evaluated providers' opinions on presentation, materials, use of time, likelihood of changing behavior (see Section II.3. below),
- At the onset of the project, we planned to contact providers at one week and six months after the presentation; it became apparent that one week was too soon to assess changes in behavior, and we changed the process to contact providers at one month and six months following the presentation, and
- Personal phone contact was attempted at the onset of the project, but it proved difficult to talk to providers, who rarely returned phone calls; the evaluation process was changed to make the one month and six month surveys available in an online tool, links to "Survey Monkey" were sent to all participants, and continued follow up is ongoing.

8. Adapt suggestions from feedback into future interventions:

- We continually evaluated providers' suggestions and feedback and used the information to incorporate into future interventions (see Section II.3. below). One example of this is it was suggested we create laminated cards with the "Six Practices for Safe Narcotic Prescribing". *HealthInsight* developed a card the size of a physician's prescribing pad, and it was included in the participant information packet disseminated at the meetings.

9. Distribute print materials.

- a. Send periodic references on the topic of opioids to all providers who attended presentations.
 - b. Submit a minimum of 2 articles to the state medical association for publication in newsletters.
 - c. Submit a minimum of 2 additional articles for physician newsletters (not including the state medical association articles) that are received by a minimum of 1,000 providers.
- 3/5/09: Sent message to all participants to date with links to the recently approved Utah Clinical Guidelines on Prescribing Opioids,
 - 3/5/09: Sent message regarding the recommendation change re: EKGs,
 - 12/08: UMA Bulletin – Article "Dying in Their Sleep",
 - 05/09: UMA Bulletin – Article "Preventing Pain Medication Deaths",
 - 06/09: UMA Bulletin – Article about the Utah Clinical Guidelines on Prescribing Opioids, article pending,
 - 06/09: UMA Medibyte Newsletter,
 - 04/09: Utah Academy of Physician Assistants Newsletter: circ. 300-650,
 - 05/09: *HealthInsight* QualityInsight Newsletter: circ. ~300 phys. & mid-levels, and
 - 06/09: Utah Academy of Family Practice Physicians: circ. 1000.

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PPMP Project Deliverables

10. Prepare monthly reports:

- a. Prepare monthly reports, including activities of that month, number of providers reached, specialties reached, communities reached, reports from feedback, reports on behavior change from follow-up phone calls, adaptations to presentations and other information as deemed relevant
- b. Monthly report of itemized expenses

- At the UDOH request, an Excel spreadsheet (see Appendix B below) was developed to meet the requirements of this deliverable, it was continually updated and made available upon request,
- Additional reports were given as follows:
 - 2/17/09 at 7:00 a.m.; Provider Intervention Review Meeting:
 - Erin Johnson, Bob Rolfs, (UDOH), Kim Bateman, Terri Rose (*HealthInsight*),
 - Discussed the Excel spreadsheet and the next training sessions (and the possibility of using clinics targeted by Medicaid Transformation Grant). Now that the guidelines are complete, also discuss the presentation and make any changes that will help to incorporate the guidelines into the education,
 - 2/17/09 at 8:00 a.m.; Report to PPMP Steering Committee:
 - Reviewed the Excel spreadsheet and reported number of providers reached to date, specialties reached, communities reached,
 - 3/30/09 at 3:00 – 5:00 p.m.; Report to PPMP Advisory Committee:
 - An informal statistical report on our performance on the grant goals, taken from the Excel spreadsheet,
 - 5/19/09 at 10:00 a.m.; Provider Intervention Review Meeting:
 - Erin Johnson, Bob Rolfs, (UDOH), Kim Bateman, Sharon Donnelly, Terri Rose (*HealthInsight*),
 - Discussed the Excel spreadsheet and the next training sessions. Also discussed the plan for submittal of the final report, final contract payment, and plans to continue to follow up on the project through December 2009, and
- Project expenses are itemized and made available upon request, 30 days following month end.

11. Prepare an interim legislative report:

- a. The interim report shall include the same information as in the monthly reports (10a) but shall also evaluate all the months up to October

- 10/09/08: The provider education detail for the interim legislative report was submitted to the UDOH. Additional project information was added and the report was submitted to the legislature on 10/15/08.

12. Prepare a final report:

- a. The final report shall include all the information from the monthly reports. It shall also summarize the entire intervention and strengths and weaknesses. Analysis must be included of the overall success of the intervention.

- This report is respectfully submitted as our final report.

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II. PRELIMINARY EVALUATION

1. Data Collection and Analysis

The PPMP Steering Committee and their work groups are responsible for assessing the impact of initiative activities on patient outcomes. *HealthInsight* will contribute process measures on presentation penetration, satisfaction with training, intent to change behavior, and engagement in implementing care process changes. The information elements are captured in a custom Access database, and an online survey tool created for this project. Initial physician and practice information is imported from our existing contact database and updated throughout the project.

HealthInsight shared our evaluation plan and data collected on the provider intervention with the UDOH analysts who are seeking funding for a more thorough analysis of the intervention using Medicaid claims and DOPL data.

2. Data Collection Components

For evaluation of this project *HealthInsight* collected and analyzed data, and report as follows:

- Number of providers reached by location, specialty, and status (retired, active, full-time, etc.) also as a percentage of the provider population in each target county. Data captured will include the frequency, duration of intervention activities each provider is exposed to including education sessions and any follow-up.
 - The number of providers reached by location, specialty, and status is continually updated (see Appendix B below),
 - Intervention and follow up activities/contacts are captured in a contact database and available upon request.
 - Meeting planning activities/contacts are captured in *HealthInsight's* contact database and available upon request.
- In addition to traditional evaluation questions on the content of the presentation and understandability, the session evaluation included questions designed to measure changes in knowledge, attitudes, norms, values, beliefs and behaviors including the provider's intent to make changes in their care processes:
 - Did they or are they planning to create the DOPL CSDB list of their patients?
 - Do they anticipate changing their prescribing practices due to information from the presentation? If so, how?
 - Are they planning to use the patient education forms?
 - Do they anticipate needing additional support to incorporate process changes in their practice?
 - Do they have additional questions for the clinical content experts?
- Follow up with these providers at one month and six months to identify and track process measures:
 - Did they create and are they using the DOPL CSDB list of their patients?
 - Have they changed their prescribing practices? If so, how?
 - Are they using the patient education forms?
 - Have they requested additional support to incorporate process changes in their practice?
 - Have they contacted the clinical content experts with additional questions?
- Process measures collected will also include:

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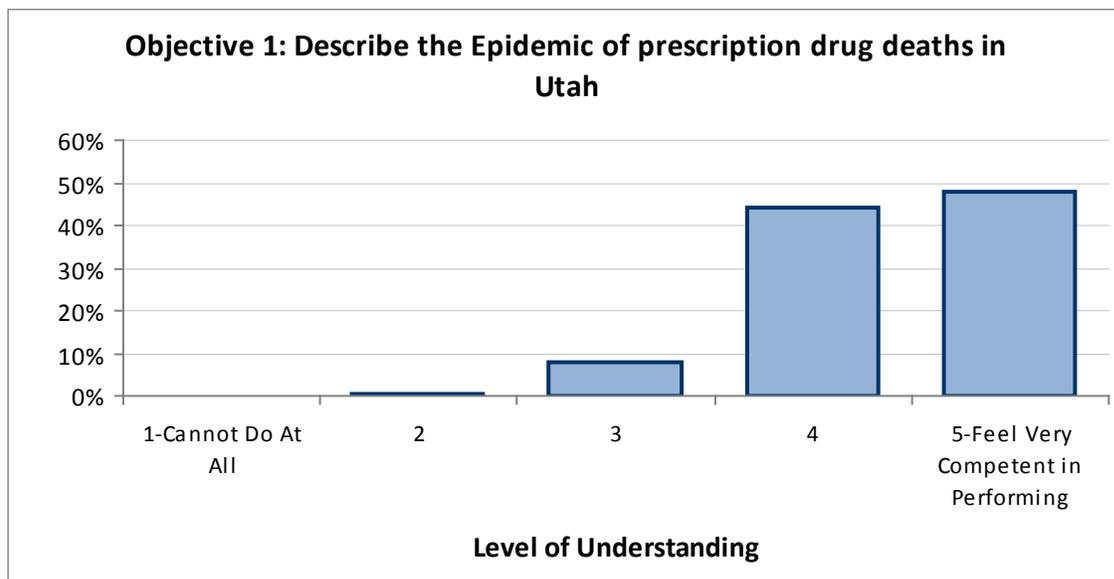
- How many practices implemented systems changes or other improvement activities based on this topic (and the types and nature of these changes and activities),
- How many accessed and used their DOPL data and how they used it,
- How many used the patient education materials and if they plan to continue to use it,
- How many self-report changes in their prescribing patterns and a description of those changes, and
- Any anecdotal qualitative information shared by providers will also be captured and reported.

3. Data Analysis

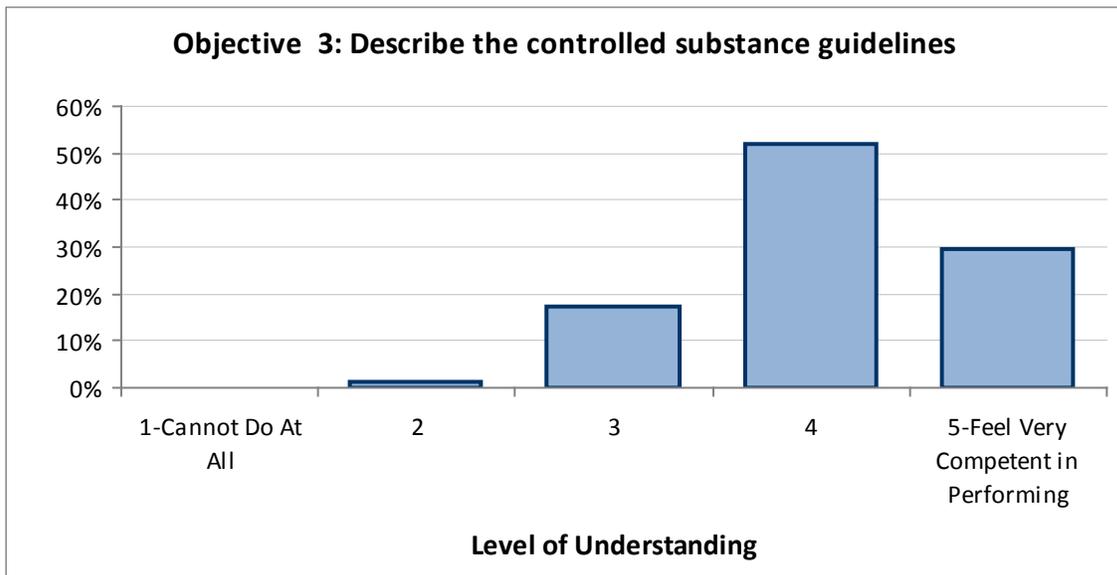
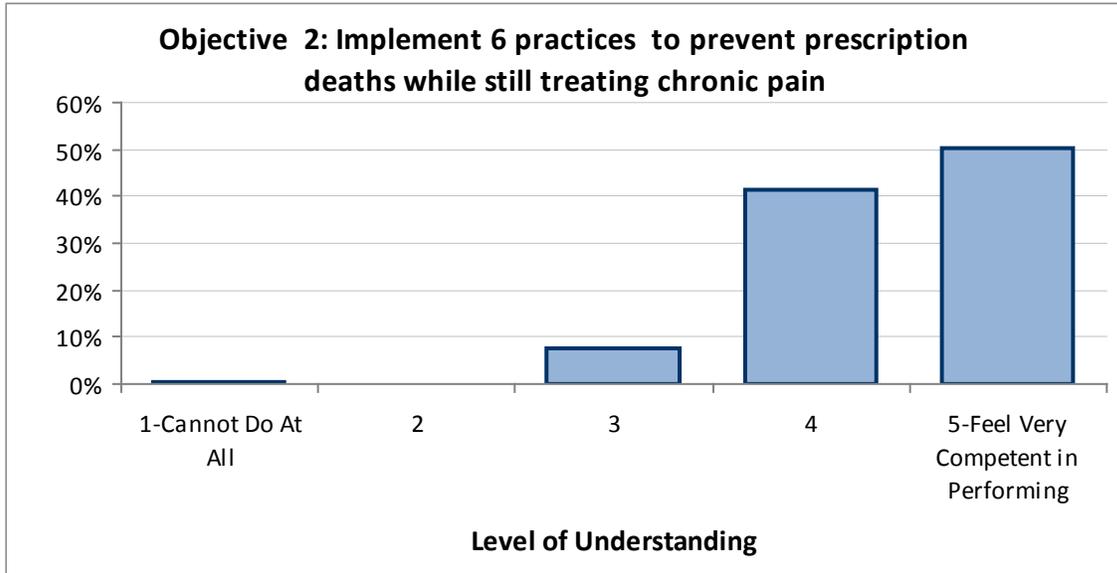
Provider evaluations of the educational sessions' content and understandability were collected after the presentation to address the above data collection components. An analysis has been performed, with the following results:

- The initial meeting evaluation included questions about the five program objectives. The objectives are:
 1. Describe the Epidemic of prescription drug deaths in Utah,
 2. Implement six practices to prevent prescription deaths while still treating chronic pain,
 3. Describe the controlled substance guidelines,
 4. Identify tools and resources for integrating the guidelines into your practice, and
 5. Assess improvements in your prescribing patterns.

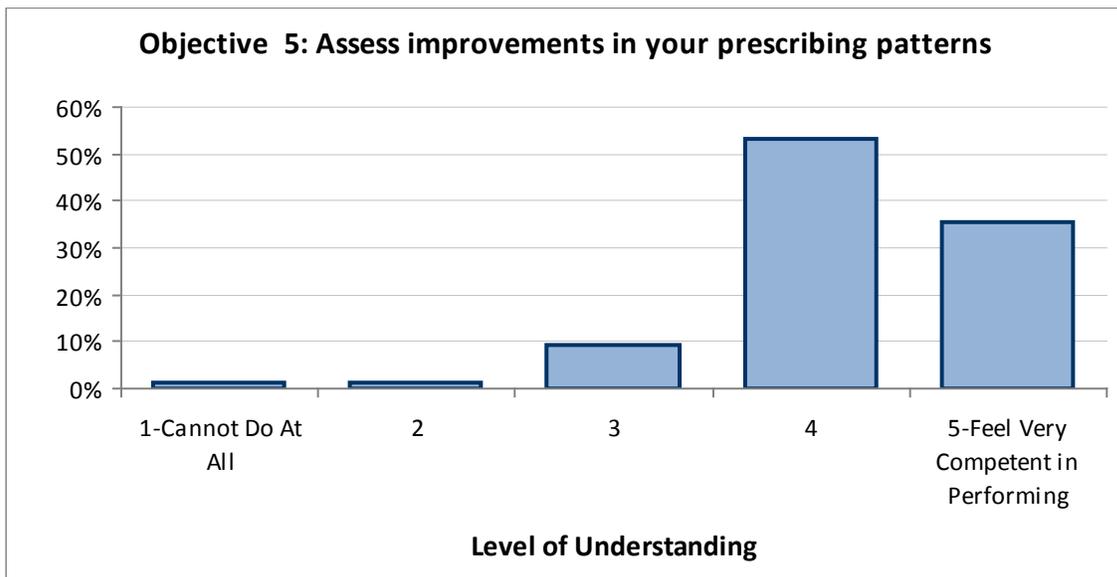
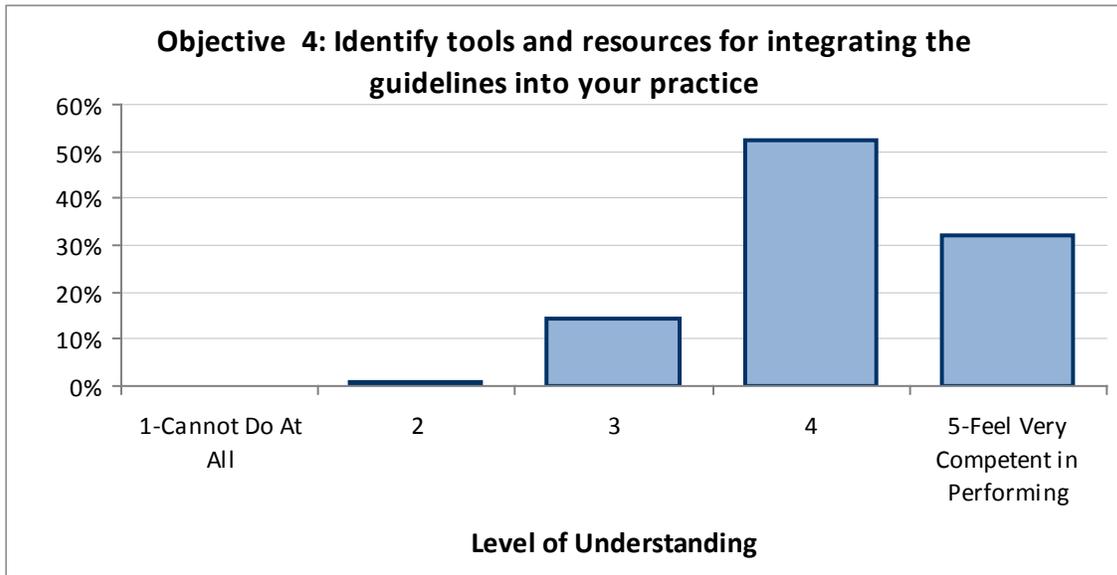
Graphs indicating participants' level of understanding of the program objectives are as follows:



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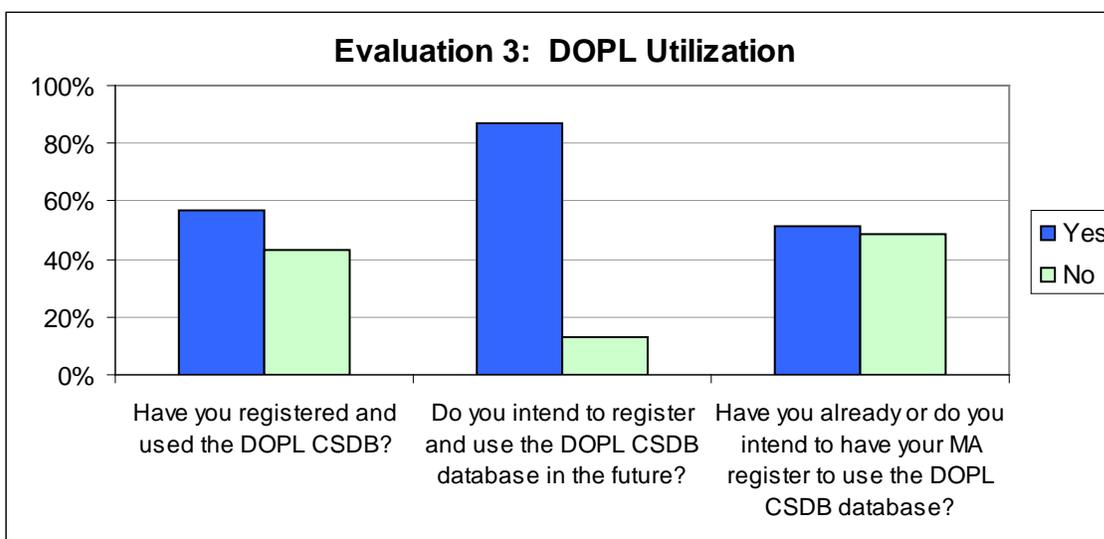
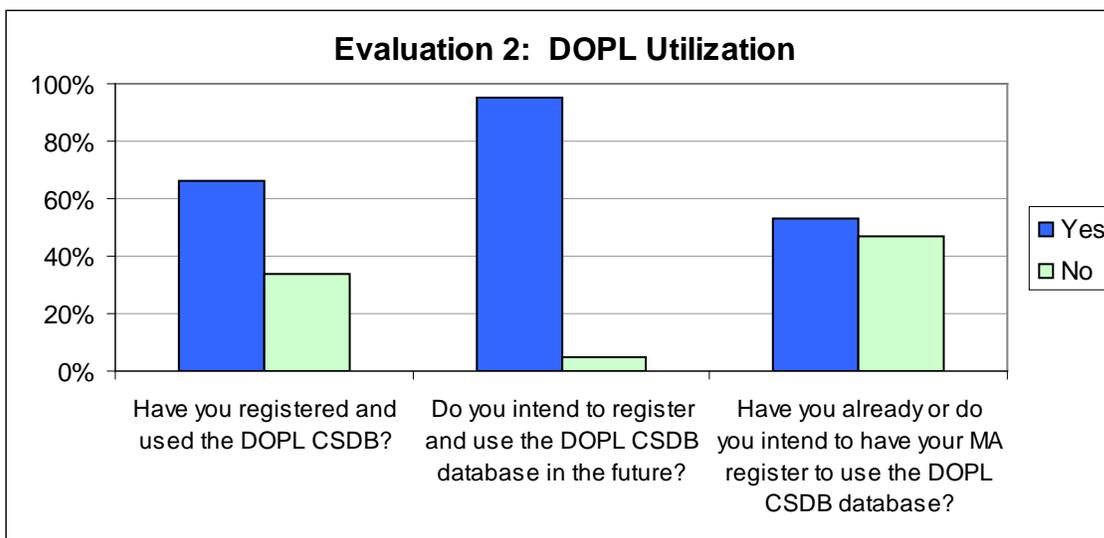
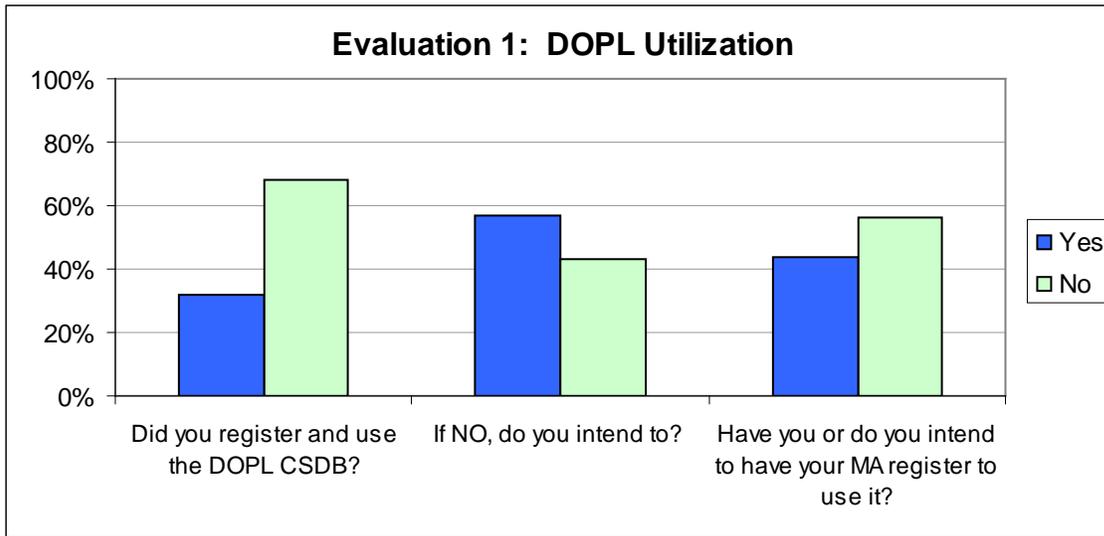


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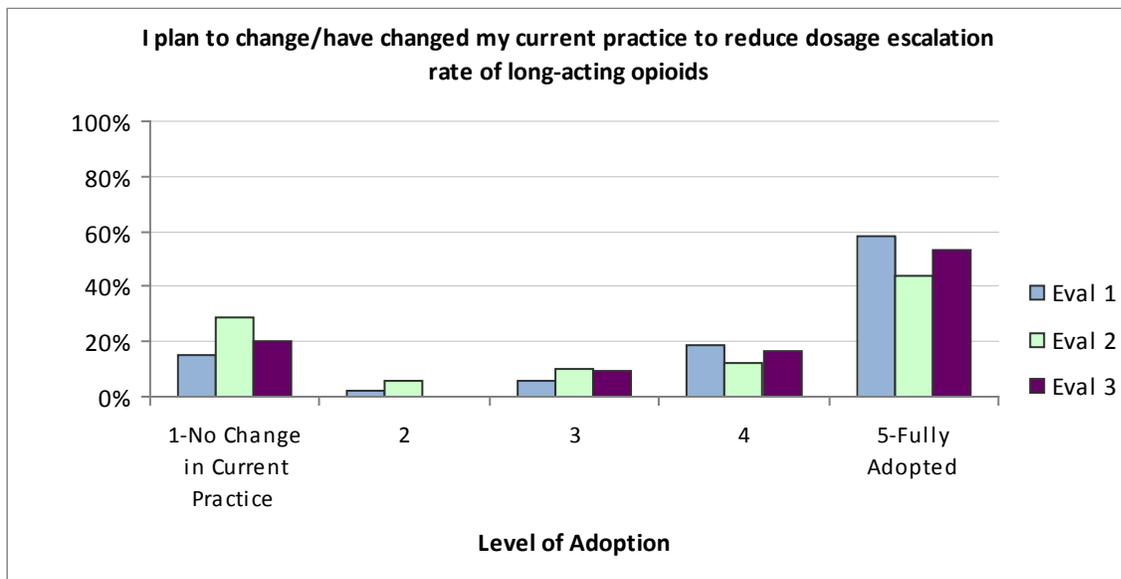
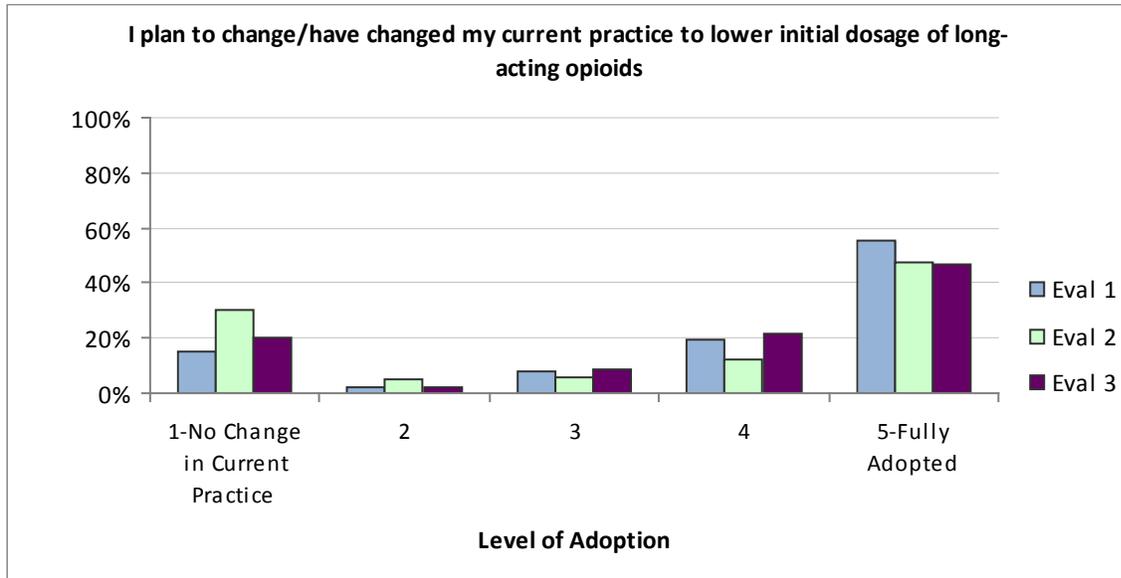
- At the time of the initial evaluation (at the end of the presentation), only 32% of the meeting participants had registered and used the DOPL CSDB. There was a substantial increase to 60% indicating they had done so in the 2nd evaluation, and 65% in the 3rd evaluation. Other questions about DOPL CSDB utilization are represented in the graphs below:

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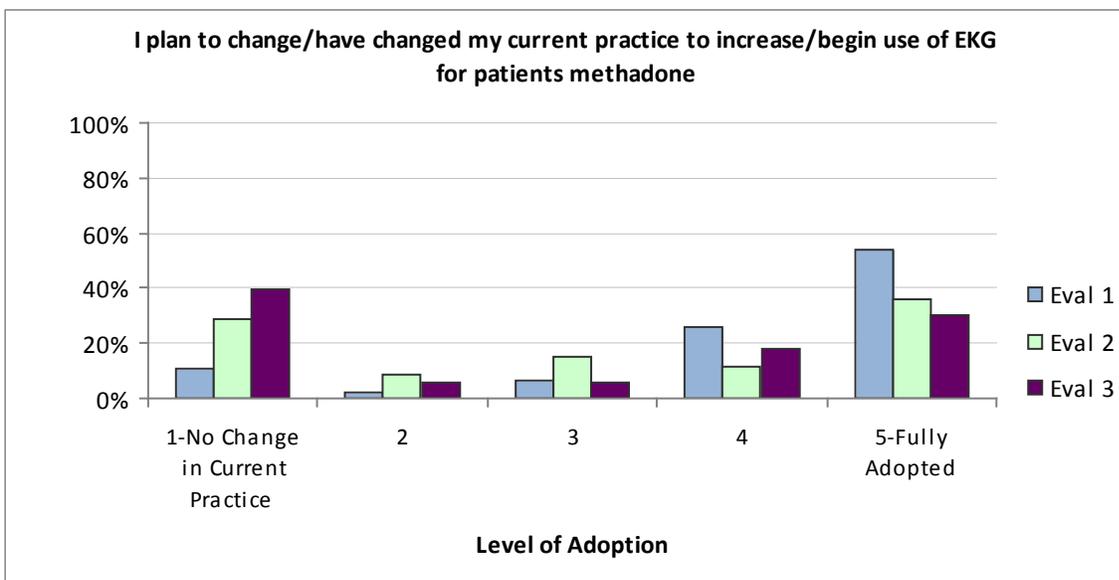
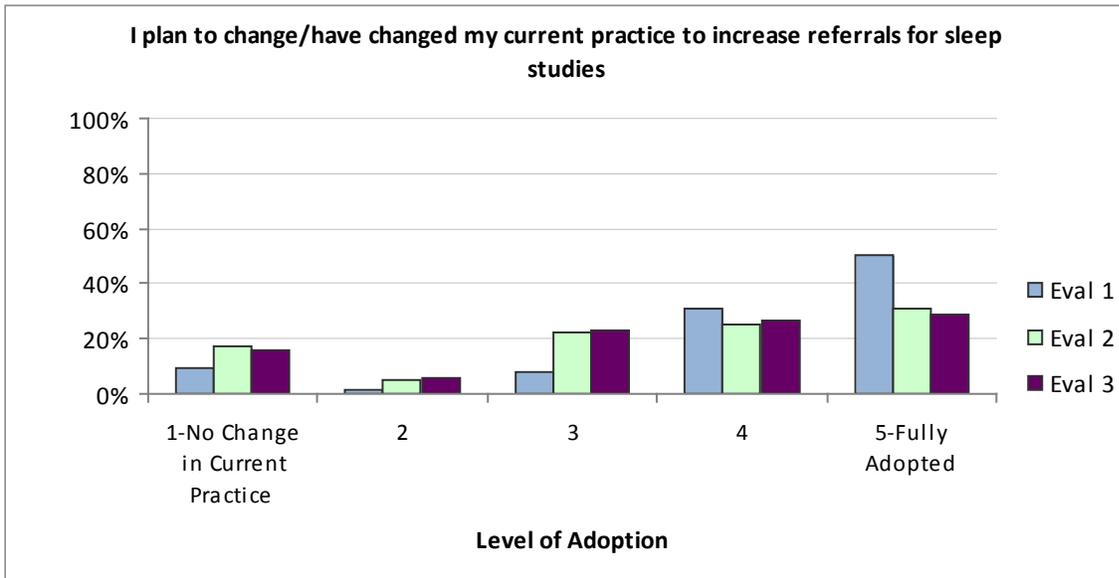


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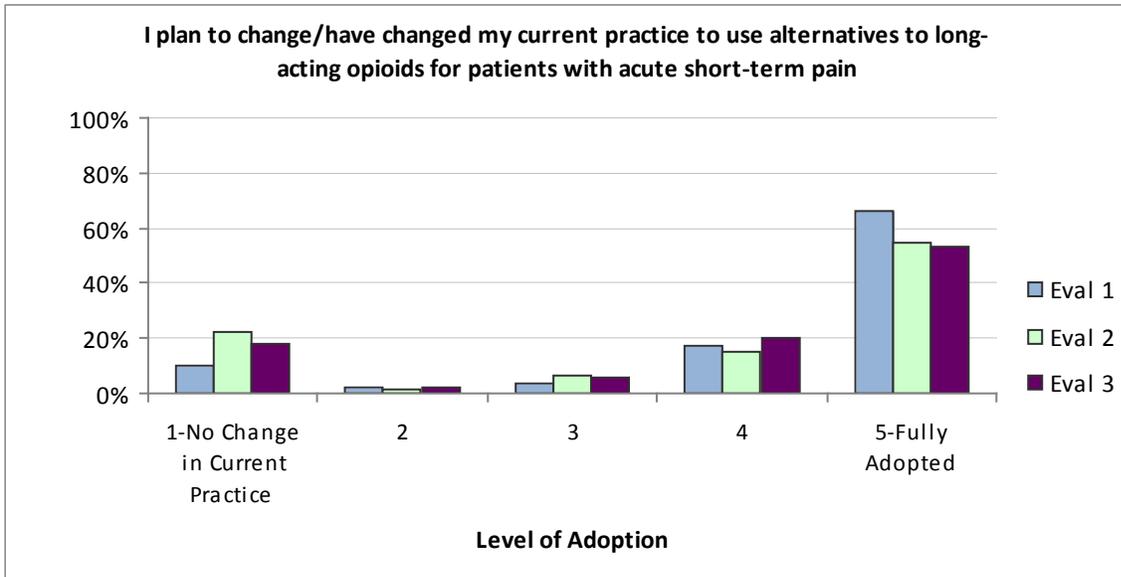
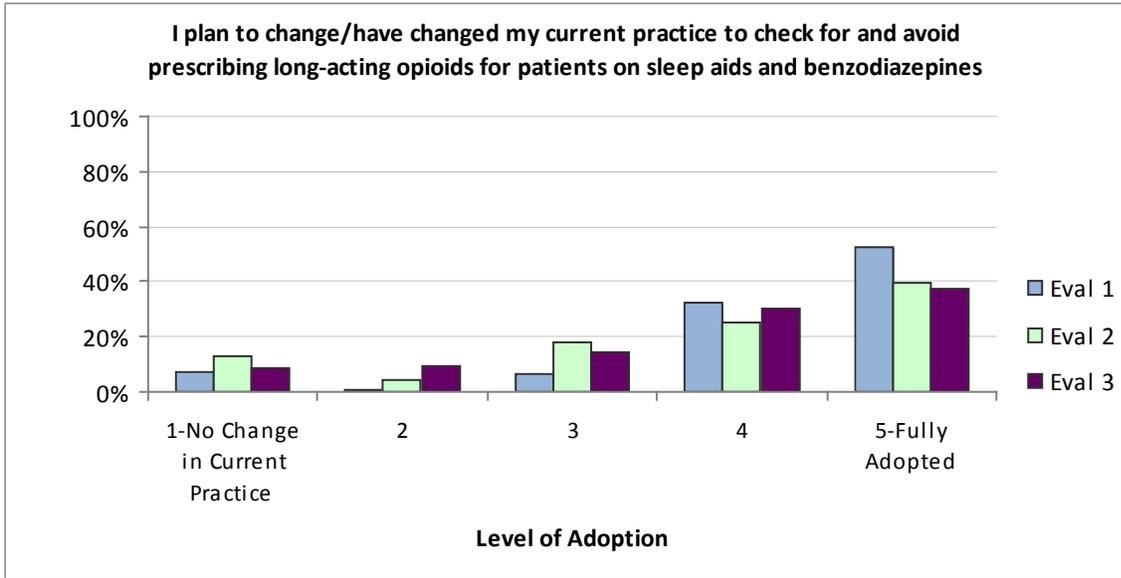
- Questions about pain medication initial dosage and escalation rates, referrals for sleep studies and EKGs for patients on methadone, overall prescribing practices, use of the Utah Clinical Guidelines on Prescribing Opioids and tools, and increased use of the DOPL CSDB were asked in the series of 3 evaluations. Graphs depicting participants' responses to these questions are below:



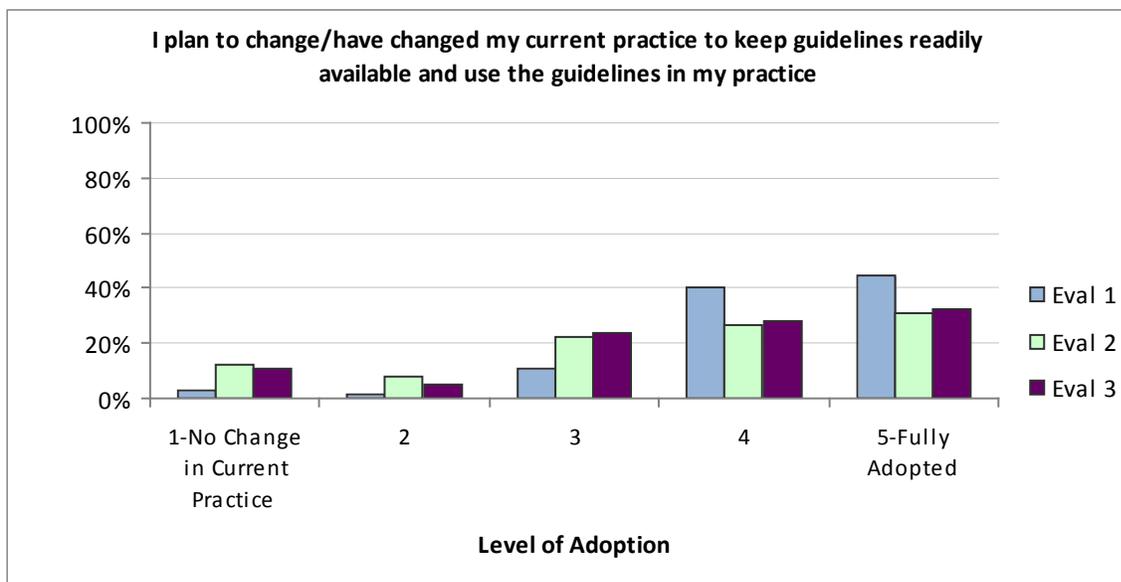
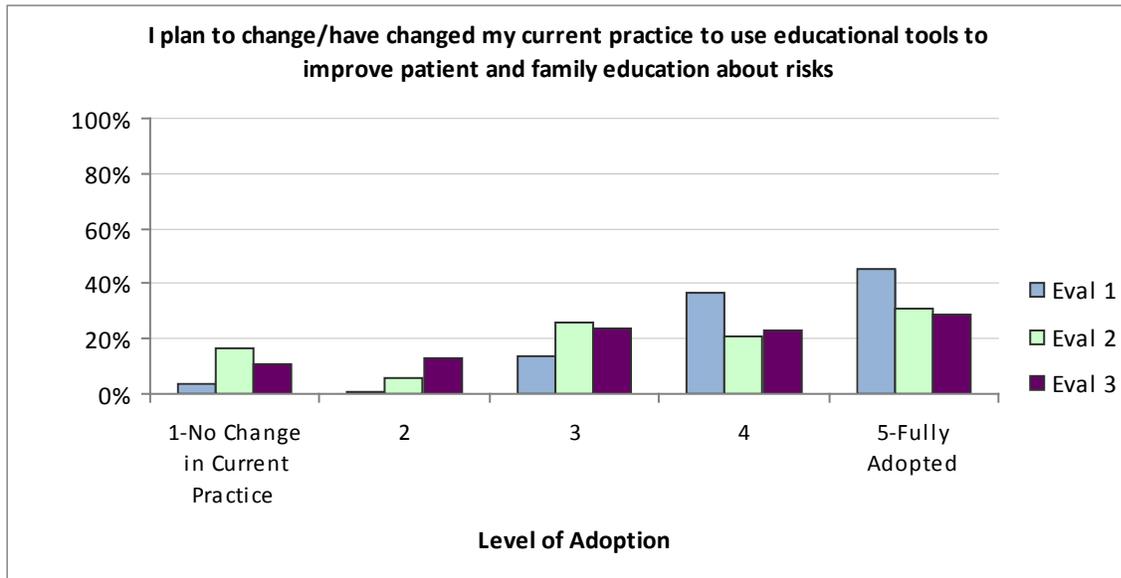
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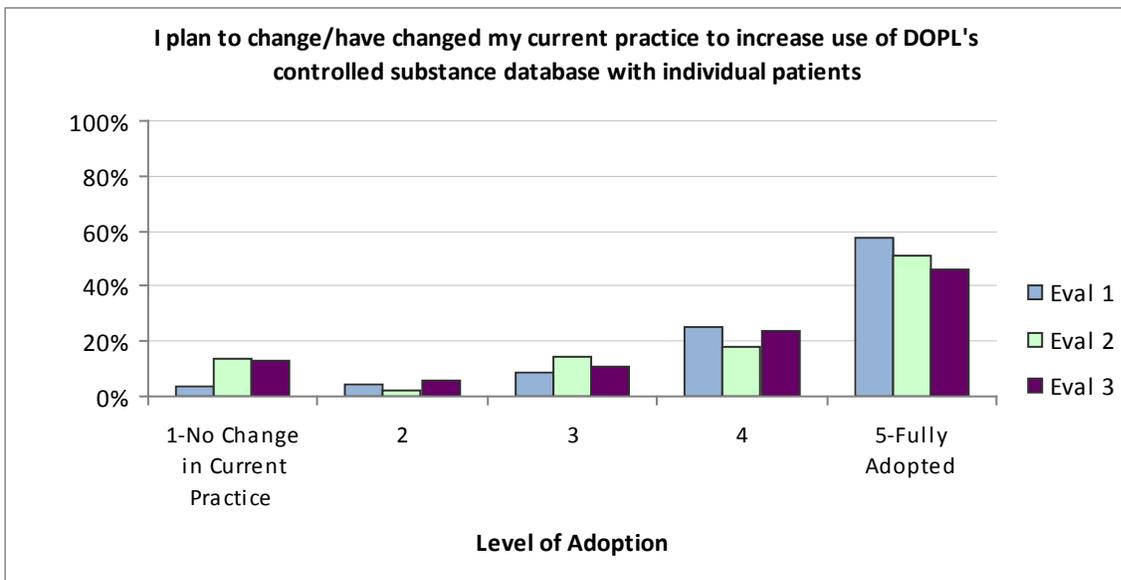
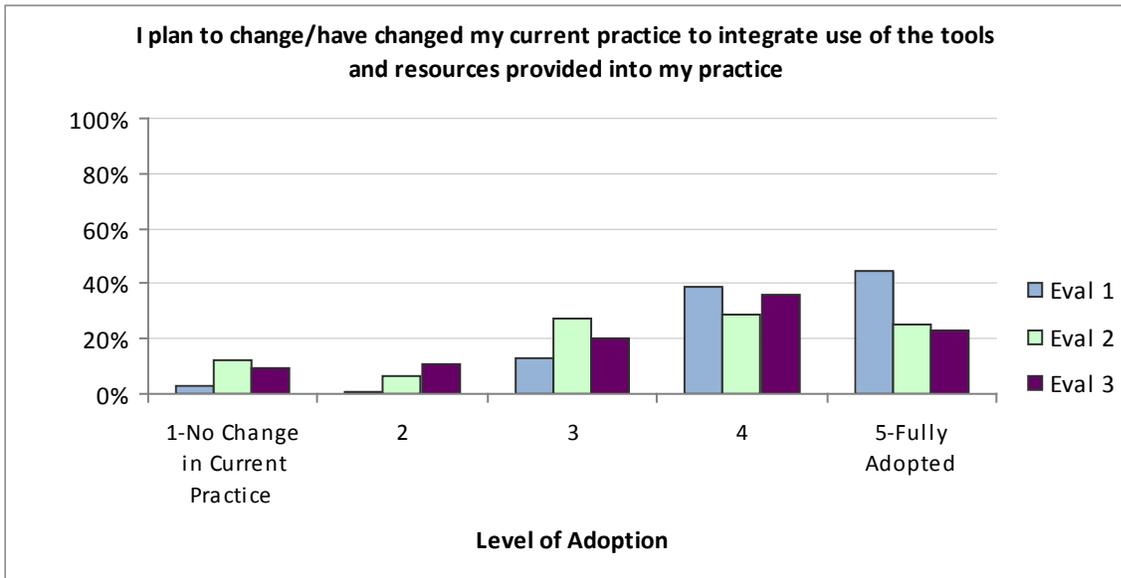
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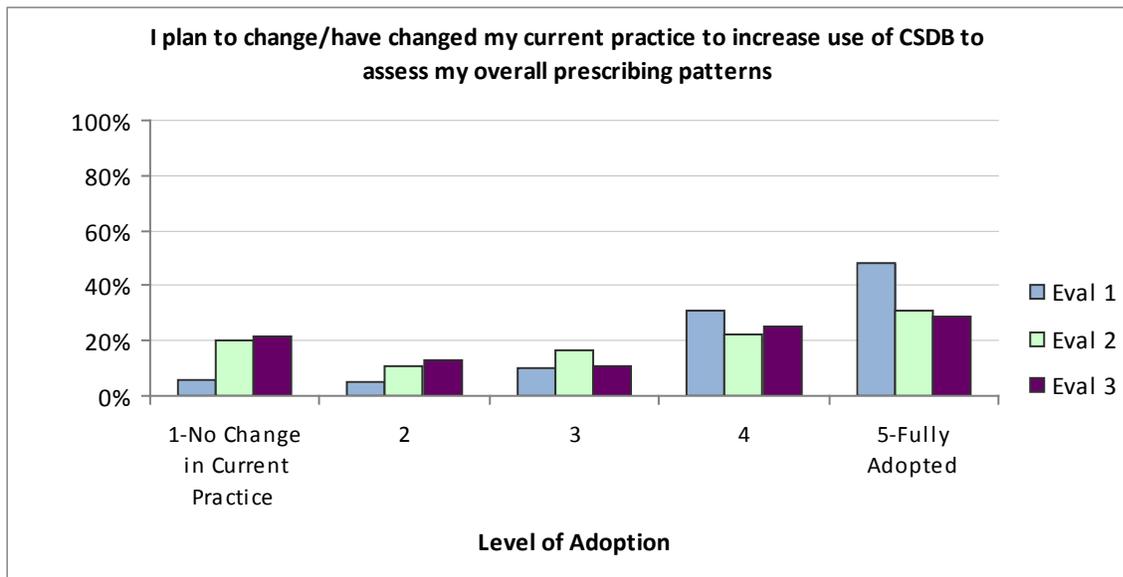
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- Below are questions with selected open-ended responses taken from the provider evaluations: (responses are listed in random order.)

What did you find most useful about the presentation and discussion?

- Overall awareness
- Drug levels and graphs
- Information, good data
- Information on methadone
- Tools and guidelines
- Almost everything. Very helpful.
- Organization/6 steps make easy to remember. Speaker was also very engaging.
- All education points, utilizing of info for my practice.
- Information regarding # of deaths per week/year
- Physiology of addiction very interesting
- Last discussion was superb
- I feel hopeful that I will not pick up patients who have been given inappropriate amounts of pain medication by other providers.
- How to implement six practices to better prescribe opioids
- Revealed my practice weakness
- To realize the increased use and deaths in the past 10 years
- Opened my eyes
- Recognition that management of chronic pain is difficult
- Doing drug screening
- Focus on this problem as an epidemic
- Pharmacology/pathology of why deaths
- Very clear presentation
- This program raised my awareness and to dangers particularly with mixing long-acting opioids with other meds
- Discussion on methadone with EKG and sleep aids
- Have f/u presentation on how to help w/ sleep in chronic pain after they have a sleep study
- Change practice patterns
- Discussion of guidelines
- Stratifying risk
- Excellent advice and statistics - very motivating to promote change
- Very well organized, based on facts which were well presented, approach is practical and doable. Discussion on methadone with EKG and sleep aids.
- DOPL site info
- Commiseration about the problem with peers
- Would like more specific emphasis on short-acting prescribing
- Explanation about respiratory depression
- I feel more comfortable helping with pain issues despite the high rate of diversion
- Discussion, questions, answers
- Knowing that the state has taken such a strong interest
- mnemonic for remembering steps, recommendation to check pts on chronic pain meds for sleep apnea
- Well done, informative
- Hand outs

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How could we improve it?

- Patient handouts with Utah specific data
- More practical examples
- More information and handouts for patients, handouts on assessing patients pain needs
- Well done already
- Discuss tapering off/safety as well
- Provide additional information on CI, SE of long/short acting opioids
- Incorporate info on other narcotics as well
- No suggestions other than make info more widely available to others, e.g. through schools, employers, etc.
- Easier to access DOPL database
- More case examples
- List provider in your slide, not doctors. Short intro to what long-term vs. short-term drugs.
- Follow rules
- Continue with ongoing discussions
- More specific recommendations - meds/dosing
- 1 to 2 day conference covering more information
- Information on chronic use of short acting opioids
- Correct fentanyl dose
- Don't think you could - it is excellent
- Great presentation
- None, good education
- Continue to come down to the rural areas
- Discuss how to deal with patients
- Laminated card
- More case study/treatment change up
- More info on long-acting pain meds
- More resources for lower cost sleep studies
- Continue what you are doing. Get air time on TV to inform.
- Continue to give to more doctors
- Longer time for questions
- Strong guidelines/help reduce barrier to guidelines
- Include information on pediatric
- Continue to add new information as available
- Perhaps provide additional info regarding opioid equivalents as well as guidelines of efficiency to determine if methadone would be worth using, e.g. is it always worth using methadone with chronic pain patients?
- Limit prescriptions
- Better tutorial on DOPL CSDB
- Regular in-service or updates - the CME is very helpful
- How to implement tools - in a time effective manner
- Thoughts on ways to avoid prescription misuse
- Condense presentation to 60 minutes – DVD
- Less time on methadone
- Change grey words on slides to black, grey words on white page background difficult to read
- Do it in parts. Offer Part II for more info.
- This is a lot of info about meds that most of us don't use; it is also too much of an ivory tower approach.

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- Give us more time to learn in more detail - I hate meeting but this was helpful
- How to implement tools in a time-effective manner
- I would like to get more information on diversion
- Use 2008 stats
- More specific drug interactions between drug classes
- Monitor patients closer
- Discuss expected and unexpected urine tox screen results & info on abuse, etc.
- Talk about meds other than methadone. Now that we understand the dangers associated with it, we don't use it. We are using other meds. We need education using other meds wisely.
- We all know that this is a big concern for all of us. I think we need more educational opportunities in the day-to-day practice management of pain patients.
- Review non-opioid options in pain management
- Review better prescription options
- More outcome discussions to assess risks and benefits of Rx
- Emphasize on drug screens
- Cover over-prescribing and prescribing of multiple opioid forms same patient/same time
- Preach to the pain clinics
- Emphasis was on methadone - since I don't prescribe that, would have been nice to cover some of the other controlled substances.
- More discussion time

How might you use the information in your work?

- More EkGs, standardized screening tool
- Better counseling with patients picking up meds. Watch for drug combs on patient profiles.
- Building a standardized pain program
- Multiple ways - we are in the process of implementing a comprehensive pain management program
- Plan to implement as above
- Prescribing / managing other health issues in patients on methadone
- Implement guidelines
- Already working on it
- Guidelines for prescribing pain meds and patient education
- Use handouts and info to inform patients
- This has reinforced my reluctance to ordering narcotics
- Education of patients improving outcomes - especially in use of sleep studies
- Be more understanding to addiction
- Better understanding
- I will use it to improve my ability
- Modify chronic pain evaluations
- Won't prescribe methadone, more careful with patients on methadone
- Watch methadone users more closely
- To provide safer care of patients with chronic pain need
- Implement PADT progress note
- Confirm my decision not to treat chronic pain
- Try to grab even more time to address all this in one visit
- Better screening of patients at risk/on opiates and other meds that are risk factors
- Increase sleep studies
- Risk assessment & better education

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- Apply more in current practice
- It will completely change my practice
- Better understanding
- I will implement many of these strategies
- I don't use methadone at all
- I will implement some practice change
- Improving care for chronic pain
- Too vague - not enough time to answer this/not sure
- Review management of each chronic pain patient. Initiate recommended guidelines.
- 6 guidelines will be posted for my long-term pain clients
- Improve counseling and prescribing
- Fully implement
- EKGs for psych meds with opioids, no sleep meds for opioid users
- More closely monitor patients
- Avoiding certain combinations
- Use DOPL CSDB more often
- Implement practice changes
- Educate staff
- Increase awareness
- I will share with the clinics that I supervise in my administrative role
- Already doing most of this
- Disseminate info
- Keep it in the form of my thought process
- Make system changes in dealing with narcotic patients
- I will start low and go slow with opioids and other controlled substances, but only after i have tried alternative therapies and have documentation of the patient's true case of pain.
- Better follow-up and management and education of patient
- Improve patient care
- Judicious use of opioids
- Keep info available
- Specific patient applications
- Discuss with other physicians
- I have seen thousands of patients - post-op, HNP, fractures, migraines, etc., none of them have needed chronic narcotics
- Improve control of large quantities
- Standard approach
- Find other avenues for pain other then pharmaceutical drugs
- Reread the slides and review with my staff
- I am working in methadone maintenance therapy program
- Be more aware in chronically ill patients who may be on pain meds from other sources
- More attention to dosing and monitoring safety
- Enable me to be aware of potential risk in patients and refer to thier degree of care
- Just be more careful. Help to know a standard protocol for starting and monitoring opioid use. Benzo will be use with more care and will decrease use of opioids.
- Evaluate what I am doing for methadone patients. Need to identify them first.
- Decrease long-acting meds
- Continual assessment of patients pain and meds
- Implement appropriate change

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4. Evaluation Summary

The evaluation reports are provided as monthly data updates on activities listed above, narrative reports at quarterly meetings, and in a preliminary and final year-end project summary report including final budget.

HealthInsight will submit the year-end project summary report in December 2009 to document the completed work including: the extent of intervention with each provider location, feedback from providers, lessons learned to be considered for incorporation in to future project phases, and any significant deviations from predicted to actual budget. This information is also submitted in the preliminary final report of June 2009.

HealthInsight analytic staff will coordinate with the UDOH Prescription Pain Medication Program (PPMP) to investigate changes in pain medication morbidity and mortality in the state over time. The rural intervention communities may be able to be compared to rural communities where the intervention does not take place, if there are any. Due to the limited number of annual cases in each community it is not expected that statistically significant reductions in mortality directly attributed to this arm of the PPMP project will be detectable in the first year of the project. If emergency department claims data becomes available, the number of cases may rise to a level that allows detection of decreased morbidity.

HealthInsight will continue to work with the Medicaid Transformation Group on the Evidence-based Pharmacotherapy Review (EbPR) program, a CMS funded initiative to improve the health of Medicaid patients suffering from pain. The EbPR focus is on providing information and support to help improve pain management and continuity of care and to prevent adverse events. One component of EbPR is providing information, based on Medicaid claims data, to physicians about medication use and visits to other providers by their patients. Providers should have already received, or will soon be receiving these reports. Another component is providing training, tools, and support to assist with changing processes in the practice to improve the quality and consistency of care for pain patients.

5. Barriers and Solutions

- A. Experience to date has shown that very few physicians are doing the pre-work and going into the DOPL CSDB to run their reports before the meeting. Some physicians claim it is difficult and cumbersome to use. The database is being redesigned with a projected roll-out date of July 1, 2009. We expect this will make the application more user-friendly.
- B. In some instances, the CME coordinators for the rural hospitals insisted on total control of materials to and from the physicians and limit outside invitations so *HealthInsight* was not able to invite physicians from neighboring rural areas. This decreased *HealthInsight's* ability to send reminders and additional instructions and negatively impacted attendance.
- C. Although having the ability to earn a considerable amount of CME is attractive to physicians, it is arranged in such a way that it is hard for the physicians to understand and the presenters take 5-10 minutes of the talk to explain. A slide was added to the presentation explaining the program in great detail, copies of which were included in the information packets disseminated at the meeting.
- D. We experienced a limitation in scheduling the larger group meetings as many of them schedule their speakers at least one year in advance. This is the reason many of these meetings are scheduled through the end of 2009.
- E. The original plan called for the initial physician follow-up interviews to take place one week after each presentation. *HealthInsight* found that most of the physicians had not done anything at that point so the follow-up interview was changed to one month after the presentation.

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- F. *HealthInsight* has had difficulty getting to the physician on the phone for the follow-up interviews so we created online survey forms that physicians can use as well as allowing them to fax or email back the survey. We will continue to conduct phone follow-up interviews with the physicians who have not participated in the online surveys.
- G. From a quality improvement standpoint, care process changes such as these may require repeated efforts over time and take a long time to achieve the targeted measure of success. Within the limited time of the project, we are pleased with the number of sessions and the amount of change we were able to measure.
- H. The delay in the approval of the guidelines and tools somewhat hampered the physician presentations. In the meantime *HealthInsight* created a one page “Pocket Guide” on the main points in the talk that physicians can use in their office. Once the guidelines and tools were finalized, physician interest improved due to higher visibility of the program.
- I. The presentations have been generally very well received. One physician had a concern about the availability and coverage of sleep studies. Another physician wanted more focus on short acting opioids as he rarely used the long acting ones. See a more complete list of participant responses in Section II.3. above.
- J. Below are the most common comments taken from the meeting evaluations:
- a. What was found useful about the presentations:
 - Updated information about methadone
 - The six “cautions”
 - The guidelines and tools
 - Information regarding number of deaths per week/year
 - b. What might be improved about the presentations:
 - Continue with ongoing discussions
 - Easier to access DOPL database
 - Well done already
 - Provide additional info on CI, SE of long/short acting opioids

III. ORGANIZATION/STAFF DESCRIPTION

1. Educational Outreach Coordinating Organization

HealthInsight is a private, non-profit Medicare Quality Improvement Organization (QIO) operating in Nevada and Utah, and is a non-profit community-based organization. Through previous Medicare and other contracts to improve health care in Utah we have developed productive working relationships with over 250 physician practices including most of the rural clinics in the state. These physicians and their staff know *HealthInsight* and trust us as a valued resource of information. This established network of relationships greatly facilitates recruitment into new projects. Our expertise in engaging providers and successfully initiating behavior change positions us well to succeed in the project outlined in this report. In addition to our extensive physician contacts we also have relationships with hospital, nursing home, home health, and hospice staff throughout the state.

Our staff is comprised of individuals from varied backgrounds with a wide breadth of experience and training in project management, human factors, behavior change, statistics, medicine, information technology, quality improvement and public health.

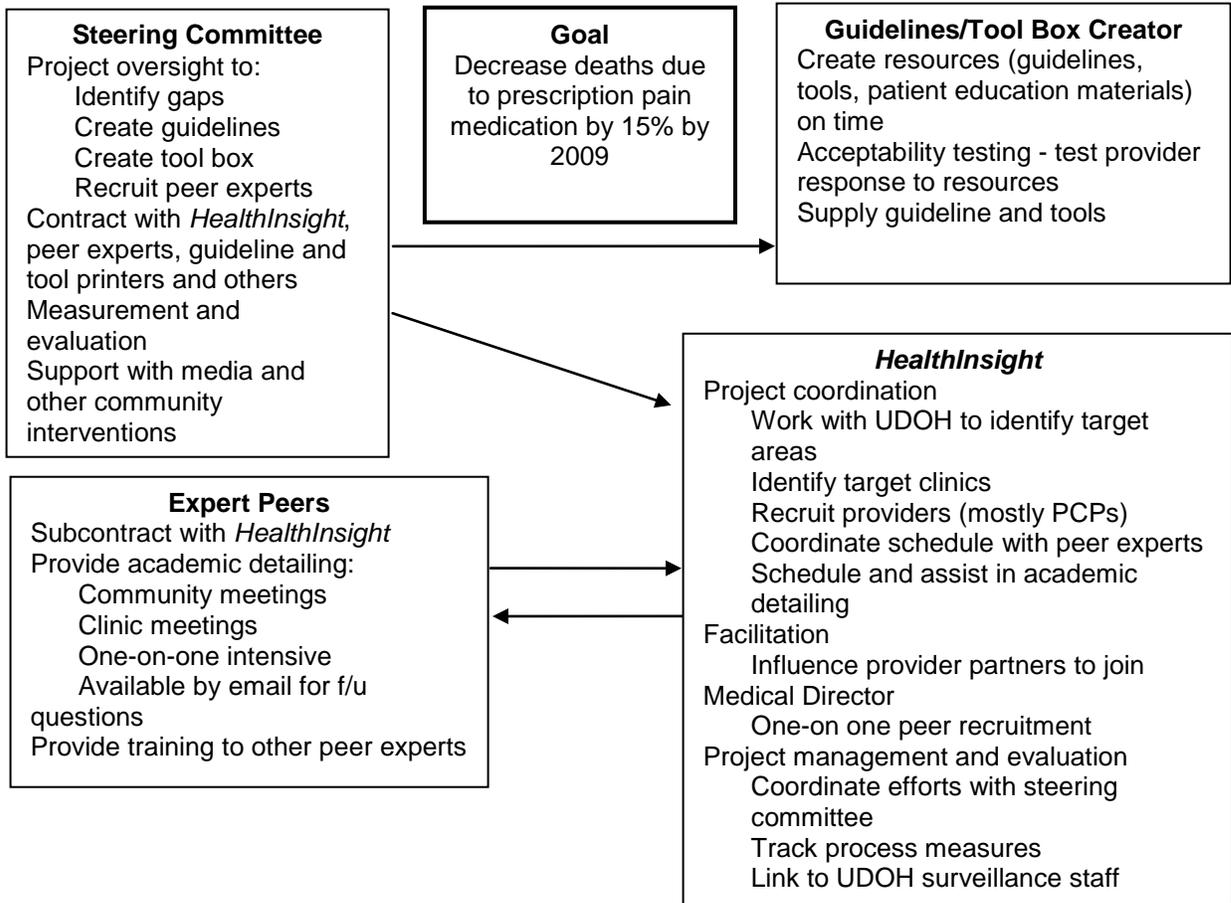
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Project staff responsibilities included:

- **Sharon Donnelly, Project Director:** Project oversight and coordination with Medicaid Transformational project and data/evaluation work groups,
- **Dr. Kim Bateman, Medical Director:** Clinical education materials development, present and train other physicians to present physician education, and sit on steering committee,
- **Terri Rose, Project Associate:** Manage day to day project activity including team meetings, setting up all educational sessions and coordinating physician presenters' schedules, coordinating with medical director and facilitators to recruit practices and communities for the education sessions, and sit on steering committee. She worked in coordination with the project analyst to create, populate and maintain the evaluation Access database. She also provided oversight and coordination with steering committee and work groups,
- **Steve Donnelly, Health Care Analyst:** Coordinate measurement and evaluation and process survey data,
- **Clinic Facilitators (Gary Berg, Dave Cook, Stormy Sweitzer, Anne Smith):** Assist in recruiting physician practices into the project,
- **Therese Borge, Administrative Assistant:** General administrative support, and
- **Expert peer physician consultants:** Help create educational sessions and present the materials in a wide variety of settings.

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Appendix A: Relationship and Responsibility Diagram



Appendix B: Provider Intervention Report

PPMP Provider Education Meeting Detail (Of the 876 attending providers, 307 were eligible to participate in the performance improvement program)														
Rural Req= 10	Urban Req= 20	Other Req= 12	Presentation Location	Date	# Invited	# "Other" Attend-ed	# Attend-ed	# Doctors (MD, PA, NP, - Psych. Etc.)	# Other (Pharm., DDS, EMT, CRNA, RN, Student Etc.)	# Comple-ted Survey 1	# Comple-ted Survey 2	# Comple-ted Survey 3	# Comple-ted CSDB Exercise	# Adopt-ed Guideli nes
			Sevier Valley Medical Center	8/7/2008	25		9	7	2	7	5	3	3	5
	1		Utah Academy Family Physicians	8/28/2008	~15		8	8		3	2	2	1	2
		1	Medicaid Chronic Pain Group	9/16/2008	16	10		6	4	0	0	0	0	0
	1		St. Marks Family Medicine	9/18/2008	14		12	12		12	1	1	1	1
1			Four Corners Behavior Health	9/23/2008	~50		20	10	10	11	5	2	2	3
1			Gunnison Valley Hospital	9/25/2008	16		9	9		7	3	3	1	3
		1	Lakeview Hospital-Grand Rounds	10/2/2008	~40		16	16		6	1	0	0	1
	1		Exodus Healthcare	10/17/2008	21		14	11	3	14	9	8	7	9
1			Sanpete Valley Hospital	10/22/2008	9		7	7		7	6	5	5	5
1			Allen Memorial Hospital	10/23/2008	22		8	6	2	6	3	3	1	3
		1	UMA Women's Conference	10/23/2008	~100	36		36		22	0	0	5	0
	1		Health Clinics of Utah	10/30/2008			24	10	14	9	3	4	3	3
	1		Davis Hospital & Medical Center	10/31/2008			19	19		18	8	6	5	8
1			Mountain West Hospital	11/4/2008	55		20	20		19	14	9	10	10
		1	Salt Lake Regional Medical Center	11/5/2008	~100	57		30	27	0	0	0	0	0
1			Central Valley Hospital	11/7/2008			7	7		7	2	2	2	2

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PPMP Provider Education Meeting Detail
(Of the 876 attending providers, 307 were eligible to participate in the performance improvement program)

Rural Req= 10	Urban Req= 20	Other Req= 12	Presentation Location	Date	# Invited	# "Other" Attend-ed	# Attend-ed	# Doctors (MD, PA,NP,- Psych. Etc.)	# Other (Pharm., DDS, EMT, CRNA, RN, Student Etc.)	# Comple- ted Survey 1	# Comple- ted Survey 2	# Comple- ted Survey 3	# Comple- ted CSDB Exer- cise	# Adopt- ed Guideli- nes
		1	SL County Medical Society	11/18/2008	~100	79		79		46	0	0	2	0
		1	IHC Learning Day	11/21/2008		25		15	10	0	0	0	0	0
	1		Mountainlands Clinic	12/3/2008			11	10	1	9	6	5	5	5
1			Heber Valley Medical Center	12/15/2008			9	8	1	8	3	1	1	3
	1		Central Utah - Payson	1/21/2009			8	5	3	7	5	3	3	5
		1	U of U - Greenwood	1/21/2009		29		23	6	18	0	0	5	0
	1		Central Utah - Provo	1/23/2009			7	5	2	7	3	2	3	3
	1		Central Utah - Provo	1/27/2009			11	4	7	6	5	3	1	5
	1		Intermountain South Sandy Clinic	2/9/2009			9	4	5	5	6	5	4	5
1			Castleview Hospital	3/3/2009	30		9	5	4	7	1	3	2	2
1			E. Carbon Medical Center	3/4/2009	20		9	1	8	6	0	1	0	0
1			Bear River Clinic	4/1/2009	25		16	7	9	7	5	2	3	4
			IMC Central Region:		~60		39	39		34	13	6	9	13
	1		Cottonwood FP, Internal Medicine, Medical Towers	4/23/2009			12	12						
	1		Taylorville, Holladay Clinic, Holladay Pediatrics	4/23/2009			11	11						
	1		Salt Lake Workmed, Internal Medicine Associates, Intermountain So. Sandy, Hillcrest Clinic, Instacare, IMC OB/Gyn	4/23/2009			16	16						
		1	IMC Clinical Learning Day	4/24/2009	35	18		16	2	10	0	0	0	0
	1		Salt Lake Clinic	4/28/2009	75		24	23	1	19	4	2	1	5

**Reducing Pain Medication Deaths In Utah:
Physician Education And Practice Redesign**

PPMP Provider Education Meeting Detail
(Of the 876 attending providers, 307 were eligible to participate in the performance improvement program)

Rural Req= 10	Urban Req= 20	Other Req= 12	Presentation Location	Date	# Invited	# "Other" Attend-ed	# Attend-ed	# Doctors (MD, PA,NP,- Psych. Etc.)	# Other (Pharm., DDS, EMT, CRNA, RN, Student Etc.)	# Comple-ted Survey 1	# Comple-ted Survey 2	# Comple-ted Survey 3	# Comple-ted CSDB Exer-cise	# Adopt-ed Guideli nes
		1	IMC Clinical Learning Day	5/15/2009		41		41		27	0	0	0	0
	1		IMC Layton	5/20/2009	25		8	8		4	3	3	3	3
	1		BYU Health Center	5/20/2009	19		16	10	6	12	8	4	6	6
	1		Intermountain Memorial Clinic	5/20/2009			9	7	2	6	3	0	2	3
	1		Olympus Clinic	5/26/2009			5	5		4	0	0	0	0
	1		U of U Neuro Psychiatric Institute	5/26/2009			9	9		9	3	1	1	2
	1		Intermountain Bountiful Clinic	5/27/2009			11	4	7	2	0	0	1	0
	1		Utah County Medical Associates	6/12/2009			7	5	2	5	1	0	1	2
		1	U of U Greenwood	6/24/2009							0	0	0	0
		1	IHC DRMC CME Lecture Series	6/26/2009		31		16	15	9	0	0	0	0
	1		Davis Family Clinic	7/14/2009			7	7		7	3	1	1	2
		1	Mountain View Hospital	8/12/2009		16		8	8	0	0	0	0	0
		1	PA Conference	8/14/2009		87		87		0	0	0	0	0
		1	Orthopedic Society Meeting	9/25/2009		78		40	38	0	0	0	0	0
		1	IHC Northern Region Learning Session	10/9/2009		66		51	15	0	0	0	0	0
		1	American Fork Hospital	10/13/2009		45		35	10	0	0	0	0	0
		1	Intermountain Dept. of Medicine	10/23-24/09		46		46		0	0	0	0	0
11	22	17	Totals:			664	436	876	224	422	134	90	100	123