Preliminary Analysis of Potential Savings to CalPERS by Evidence-Based Substitutions within Selected Prescription Drug Categories

Michael Fischer, M.D., M.S.
Program Director, National Resource Center for Academic Detailing (NaRCAD)
Assistant Professor of Medicine, Harvard Medical School
Boston, MA

CalPERS Pension and Health Benefits Committee
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Gaps in cost/quality

Overuse of therapies (expense without clinical benefit)

- Early use of MRI for back pain

Use of ineffective treatments (nonbeneficial/potentially harmful)

- Rosiglitazone (Avandia)

Underuse of effective treatments

- Insulin for diabetics

Use of treatments that are more expensive, yet not more effective

- Multiple medication areas (e.g., anti-hypertensive drugs and lipid-lowering drugs)

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Medical cost/quality improvement

Identification of gaps in cost-effectiveness or quality

- Prescription data
- Benchmark comparisons
- Health outcomes research

Narrowing or eliminating the gaps

- Policy changes
- Guidelines
- Patient education
- **Physician education/outreach (Academic Detailing)**

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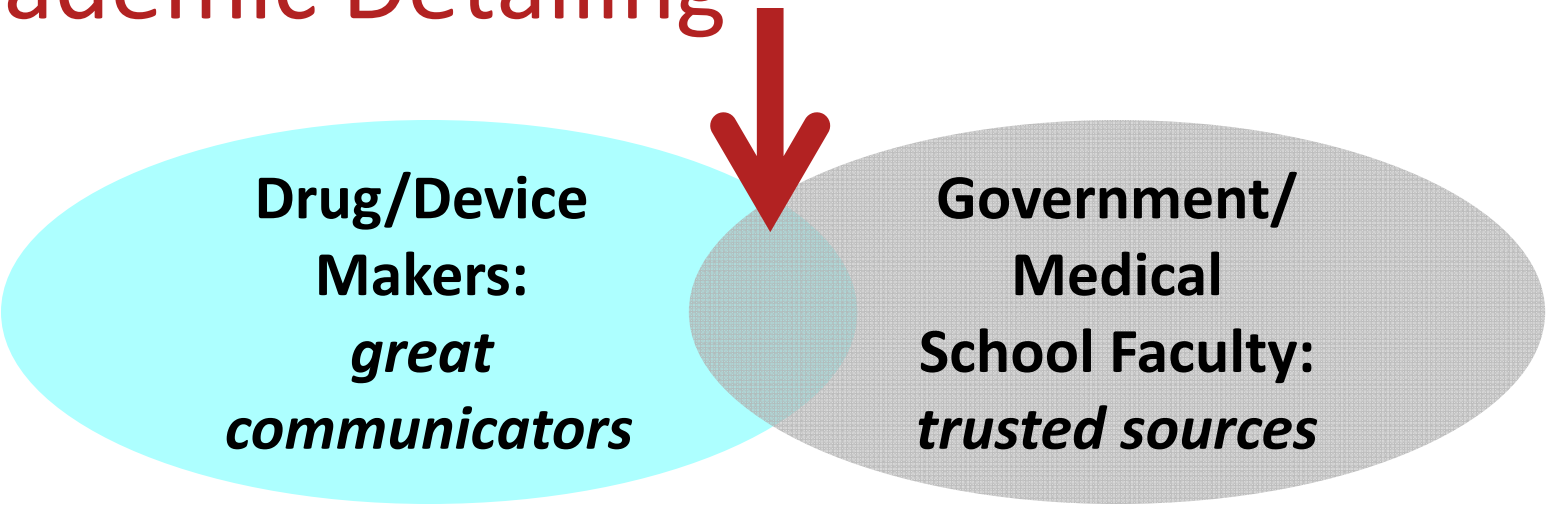
Academic Detailing



An innovative method of service-oriented educational outreach for physicians.

- Supports improved clinical decision making by fostering one-on-one interaction between physicians and health professionals trained to communicate the latest evidence-based clinical data.
- Provides an accurate, up-to-date synthesis of relevant clinical information in a balanced and engaging format.

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Academic detailing is increasingly being implemented (Partial Listing)

USA

- Initiatives in various states
  - **California** – Kaiser Permanente
  - **Connecticut** – CHDI
  - **District of Columbia** – DOH
  - **Idaho** – Medicaid
  - **Louisiana** – LCCCP
  - **Maine** – DHHS
  - **New York** – Medicaid
  - **Oregon** – OHSU
  - **Pennsylvania** – Aged Care
  - **South Carolina** – Medicaid
  - **Vermont** – Medicaid
- **National** – new effort funded by AHRQ

World

- **Australia**
- **Canada**
- **Netherlands**
- **New Zealand**
- **Portugal**
- **Sweden**
- **United Kingdom**

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Academic detailing proven effective

For changing prescribing

- Originally developed and proven by our team
- Verified in multiple other settings (US and international)
- Used successfully by Kaiser

For containing costs

- Initial studies showed $2 savings per $1 spent
- Cost impact largest when avoiding unsafe prescribing

Acceptability with clinicians

- Must maintain clinical credibility
- Messages on both cost and quality

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The approach…

Focused on 6 therapeutic areas (9 classes)

- Strong evidence-base favoring cost effective treatments
- Easily substitutable
- Readily identifiable from prescription data alone

Analyze 2011 CalPERS Basic Plan prescription data

- 1.6 million prescription records
- $128 million in costs

Compared substitution rates vs external benchmarks

- BSC, Kaiser, Medco (self-funded PPO PBM in 2011)
- Identified potential savings vs. benchmarks of other public programs

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Nine classes of drugs

Statins (lipid-lowering drugs)

Vytorin (lipid-lowering drug)

Other lipid-lowering drugs

Angiotensin Receptor Blockers (ARBs, for hypertension)

ARB combinations

Glitazones (for diabetes)

Proton Pump Inhibitors (PPIs, for peptic ulcer disease etc.)

Selective Serotonin Reuptake Inhibitors (SSRIs, for depression)

Quinolones (antibiotics)

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Substitution rates by drug category and plan, vs. external benchmark rates, 2011

Category	BSC	Kaiser	Medco	CalPERS average	Bench-mark
Statins	87%	92%	40%	73%	93%
Vytorin	30%	39%	26%	30%	99%
Other lipid-lowering drugs	19%	58%	8%	17%	50%
ARBs	83%	99%	85%	86%	95%
ARB combinations	68%	100%	76%	79%	88%
Glitazones	76%	85%	76%	78%	88%
PPIs	75%	98%	46%	69%	78%
SSRIs	81%	93%	71%	71%	80%
Quinolones	80%	90%	72%	80%	93%

Annual potential savings at external benchmark substitution ($millions)

Category	BSC	Kaiser	Medco	CalPERS total
Statins	$2.3	$0.3	$16.4	$19.0
Vytorin	$3.5	$1.3	$1.9	$6.7
Other lipid-lowering drugs	$2.7	-	$3.7	$6.4
ARBs	$3.2	-	$1.2	$4.5
ARB combinations	$1.6	-	$0.7	$2.3
Glitazones	$3.7	$0.5	$2.5	$6.6
PPIs	$0.7	-	$8.4	$9.2
SSRIs	-	-	$0.01	$0.01
Quinolones	$0.6	$0.1	$0.9	$1.6
Total	**$18.3**	**$2.2**	**$35.9**	**$56.4**

Key findings

Substantial potential savings

- 2011 potential savings of $56M (44% of $128 million in costs for the nine selected categories)
- Similar findings for 2009-2010

Implications for additional analyses

- Only aggregate data
- Potential quality opportunities in other clinical areas
- Future adjustment for demographic and clinical factors

Need for interventions to address the possibilities

- Evaluate type of behavior change sought
- Identify interventions that can accomplish goals

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Next Steps

Verification of currently identified opportunities

Analysis of more detailed data

- Geographical variation
- Variation across providers

Assess best ways to bridge the gaps

- Policy changes
- Guidelines
- Academic detailing interventions

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