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# Behavioral Science Underpinnings for Addressing Barriers to Patient Adherence on HEDIS Well-Care Visit Measures: Evidence from Patient Surveys, 2006-2010

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**L.A. Care**  
HEALTH PLAN®



# Presenter Disclosures

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**(1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:**

I am employed as a Senior Biostatistician at L.A. Care Health Plan – the Local Initiative Health Authority of Los Angeles County, California.

L.A. Care is a public entity competing with commercial insurers in the Medicaid and S-CHIP markets in L.A. County.

**Notes:**

CAHPS® is a registered trade name of the Agency for Healthcare Research and Quality (AHRQ).  
HEDIS® is a registered trade name of the National Committee for Quality Assurance (NCQA).

# Outline



- I. Learning Objectives.
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  - IX. Recapping Learning Objectives
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## I. Learning Objectives

1. Analyze reasons why patients report not adhering to recommendations on getting well-care visits (HEDIS).
2. Evaluate patients' self-reported reasons for non-adherence to medical advice regarding checkups in light of behavioral science models regarding intrinsic and extrinsic motivators.
3. Describe ways to adapt patient satisfaction surveys (CAHPS) to identify actionable reasons for patients' non-adherence to clinical guidance.
4. Discuss methods to design health promotion interventions to improve patient compliance based on models from the social and behavioral sciences.
5. Evaluate methods to design provider training and incentives to improve member compliance, and note the strengths and limitations of rational economic and financial incentives.



## II. Background – L.A. Care Health Plan



Large, diverse membership in Los Angeles, California:

- Mostly Medicaid, urban, 2/3<sup>rd</sup> pediatric, often Spanish-speaking.
- Roughly 21% of Medicaid managed care population in California.
- Roughly 2.1% of Medicaid managed care population in the U.S.
- Roughly 1-in-14 L.A. County residents is an L.A. Care member.
- Mostly Medicaid, some S-CHIP, SNP, and special programs.
- Serves 10 distinct language concentrations ("threshold languages"): Spanish, English, Armenian, Korean, Cambodian, Chinese, Russian, Vietnamese, Farsi, Tagalog.
- Mostly urban and suburban; 1 semi-rural region in the high desert.

### III. Improving Patient Adherence

“A key health policy question is, what would it take for consumers to become effective and informed managers of their health and health care? What skills, knowledge, beliefs, and motivations do they need to become ‘activated’ or more effectual health care actors?”



“Activation appears to involve four stages:

- (1) believing the patient role is important,
- (2) having the confidence and knowledge necessary to take action,
- (3) actually taking action to maintain and improve one's health, and
- (4) staying the course even under stress.”

Source: Hibbard, Stockard, *et al*, Health Services Research, August 2004; 39 (4, Pt. 1): 1005-26.

This approach is consistent with classical motivation theory, which seeks to help individuals desire an outcome, get the tools/knowledge/resources necessary to action, and to instill a belief that the action will bring the desired outcome (maintaining and improving one’s health).

*Note that the first stage implies motivating or even “activating” the doctor to recognize the necessity of engaging the patient as part of the delivery of health care.*

## IV. Patient Activation versus Conventional Approaches



**“Activating” a patient to adhere with clinical guidelines (Hibbard, *et al.* 2004) borrows from classical motivation theory, where motivation is a multi-step chain of conditions that each must be addressed before the action makes cognitive sense to the actor (the patient). At minimum:**

- a. Awareness of the possible positive outcome.
- b. Desiring the outcome, perceiving its value as equivalent to the required effort.
- c. Knowledge of how (actions and steps) to get the outcome.
- d. Possessing the tools and skills required to perform those actions.
- e. Possessing the resources required to take those actions.
- f. Belief that the reward will be received if the actions are taken.

**Conventional interventions to improve patient adherence typically focus on some of those aspects, but rarely on the full chain necessary for action. The staff time and costs of teaching, coaching and persuading patients the required knowledge, skills, abilities, values and beliefs – are substantial even for *willing* patients. Interventions often punt at that point, offering financial or in-kind incentives, which have the virtue of simplicity. Three problems with that approach:**

1. Obliges the patient to figure out elements “a” thru “f” on his/her own.
2. When the incentive runs out, compliance may cease, with resistance to future recruitment.
3. Interventions based on the rational economic model tend to underpay difficult cases; overpay easy cases who were already compliant or had few barriers.
4. Likely does not condition the patient to internalize compliance with well-care as a habit.

## V. Design: Adding Questions to CAHPS Survey Asking, Patients' Reasons for Not Seeking Well-Care Visits



**#f. Please mark any reasons that kept you from making or keeping an appointment for [you / your child] to visit a doctor, nurse, or clinic in the last 12 months. (Check all that apply.)**

- (a) No one at the clinic asked me to schedule [my / my child's] next visit.
- (b) [I / We] received no reminders from [my / my child's] health plan by mail or telephone to make an appointment [\_ / for my child] to see the doctor.
- (c) [I / We] cannot take time away from work or school.
- (d) [I / We] cannot find or afford child care for my [\_ / other] children.
- (e) [I / We] have difficulty getting transportation to my [\_ / child's] doctor's office by car or bus or train.
- (f) [I / We] cannot get an appointment at a good time of day.
- (g) The doctor doesn't speak [my / our] language.
- (h) The appointments are too far in the future.
- (i) [My / My child's] doctor's phone number or address is not correct.
- (j) [My / My child's] doctor's phone number is usually busy or no one answers.
- (k) At the clinic, [I / we] spend too much time waiting to be seen by my [\_ / my child's] personal doctor.
- (l) I cannot find [my / my child's] Member Identification card.
- (m) Other problems (Please specify):
- (n) [I / We] have not had any problem making or keeping an appointment with [my / my child's] personal doctor.



## VI. Adding HEDIS Visit Barriers Questions to CAHPS



**#g. [People / Parents] sometimes [go / take their children] to visit doctors even when [they / their children] do not feel sick. They go to check [their health / for normal growth] or to get tests or vaccinations to prevent illness. The following are some personal reasons why [people / parents] sometimes do not [go / take their children] for routine visits.**

**Please mark any reasons that kept you from making or keeping an appointment to get a routine examination or check-up or test [ \_ / for your child] in the last 12 months. (Check all that apply.)**

- (a) [I / We] cannot find a doctor that [I / my child and I both] like.
- (b) [I / My child] was not sick in the last 12 months.
- (c) [I / We] often get seen by someone other than my [ \_ / child's] personal doctor.
- (d) [I / We] don't have time to look for health problems that might not exist.
- (e) The doctor's office or clinic is crowded or uncomfortable.
- (f) I can't afford [ \_ / for my child] to be sick right now.
- (g) The doctor's office or clinic is not clean and safe.
- (h) [My / My child's] doctor has questions or advice on personal things that I don't want to discuss.
- (i) The doctor finds health problems that [I / we] cannot do anything about.
- (j) [I do / My child does] not like being physically examined by doctors or nurses.
- (k) The doctor or nurse gives health advice that is hard to follow.
- (l) Other reasons (Please specify):
- (m) I have not avoided an appointment with my personal doctor for any reason.

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## VII. Child Medical health care barriers to adherence for well-care visits, Intrinsic versus Extrinsic barriers.



LAC MCAL Pooled % 2006-2010	BARRIER	REASONS FOR NOT GETTING CHILD WELL-CARE
53.9%	-	<i>g.14</i> We have not had any problem making or keeping an appointment with my child's personal doctor or nurse.
53.3%	-	<i>h.13</i> We have not avoided an appointment with my child's personal doctor or nurse for any reason.
47.9%	<i>Intrinsic</i>	<i>h.2</i> <b>My child was not sick in the last 12 months.</b>
37.7%	<i>Intrinsic</i>	<i>g.1</i> No doctor, nurse, or clinic staff, asked me to schedule my child's next visit.
40.0%	<i>Mixed</i>	<i>g.11</i> At the clinic, we spend too much time waiting to be seen by my child's doctor or nurse.
25.7%	<i>Mixed</i>	<i>g.6</i> We cannot get an appointment at a good time of day.
27.5%	<i>Intrinsic</i>	<i>g.7</i> <b>The doctor doesn't speak our language.</b>
21.1%	<i>Extrinsic</i>	<i>g.2</i> We cannot take time away from work or school.
19.8%	<i>Intrinsic</i>	<i>g.2</i> We cannot take time away from work or school.
18.0%	<i>Intrinsic</i>	<i>h.3</i> We often get seen by someone other than my child's personal doctor or nurse.
17.8%	<i>Intrinsic</i>	<i>h.10</i> My child does not like being physically examined by doctors or nurses.

## VII. CAHPS: Intrinsic & Extrinsic Barriers To Child Well-Care Visits (Cont.)



LAC  
MCAL  
Pooled %

### 2006-2010 BARRIER REASONS FOR NOT GETTING WELL-CARE

17.4%	<i>Extrinsic</i>	<i>h.7</i> The doctor's office or clinic is not clean and safe.
15.5%	<i>Intrinsic</i>	<i>h.1</i> We cannot find a doctor that my child and I both like.
12.5%	<i>Intrinsic</i>	<i>g.8</i> The appointments are too far in the future.
11.4%	<i>Intrinsic</i>	<i>g.12</i> I cannot find my child's Member Identification card.
10.0%	<i>Intrinsic</i>	<i>g.5</i> We have to change buses or trains too many times to reach the doctor's office.
10.0%	--	<i>h.12</i> Other reason.
9.7%	-	<i>g.13</i> Other problem.
9.2%	<i>Intrinsic</i>	<i>h.6</i> I can't afford for my child to be sick right now.
8.5%	<i>Extrinsic</i>	<i>g.4</i> We cannot find or afford transportation to the doctor's office.
8.2%	<i>Intrinsic</i>	<i>h.4</i> We don't have time to look for health problems that might not exist.
7.9%	<i>Extrinsic</i>	<i>g.3</i> I cannot find or afford child care for my other children.
6.6%	<i>Intrinsic</i>	<i>h.11</i> The doctor or nurse gives health advice that is hard to follow.
5.5%	<i>Intrinsic</i>	<i>h.8</i> My child's doctor or nurse has questions and advice about personal or family choices that I do not want to discuss.
3.8%	<i>Intrinsic</i>	<i>h.9</i> The doctor or nurse finds health problems that we cannot do anything about.

## VIII. Intrinsic & Extrinsic Barriers To Well-Care Visits, Child vs. Adult comparisons.



LAC Child MCAL Pooled % 2006-2010	LAC Adult MCAL Pooled % 2006-2010	BARRIER	Ques.	REASONS FOR NOT GETTING CHILD WELL-CARE
3,827	2,989	-	-	N: Sample size
53.9%***	45.4%	-	g.14	I / We have not had any problem making or keeping an appointment with my child's personal doctor or nurse.
53.3%***	46.1%	-	h.13	I / We have not avoided an appointment with my / my child's personal doctor or nurse for any reason.
47.9%	41.4%	<i>Intrinsic</i>	h.2	I / My child was not sick in the last 12 months.
37.7%	28.0%	<i>Intrinsic</i>	g.1	<b>No doctor, nurse, or clinic staff, asked me to schedule my child's next visit.</b>
40.0%	32.4%	<i>Mixed</i>	g.11	At the clinic, I / we spend too much time waiting to be seen by my / my child's doctor or nurse.
25.7%	20.9%	<i>Mixed</i>	g.6	I / We cannot get an appointment at a good time of day.
27.5%	25.1%	<i>Intrinsic</i>	h.5	The doctor's office or clinic is crowded or uncomfortable.
21.1%***	7.8%	<i>Extrinsic</i>	g.7	<b>The doctor doesn't speak our language.</b>
19.8%	24.6%**	<i>Intrinsic</i>	g.2	I / We cannot take time away from work or school.
18.0%	16.8%	<i>Intrinsic</i>	h.3	I / We often get seen by someone other than my child's personal doctor or nurse.
17.8%**	9.3%	<i>Intrinsic</i>	h.10	I / My child does not like being physically examined by doctors or nurses.

Tests w/i rows: **Significantly lower** , **Significantly higher** , Data pooled 2006-11. Percents: Diff. of prop. test; averages: t-test; ( $\alpha=0.05$ ,  $df=5$ ).

\* = Breslow-Day test(Homogeneity or OR) was significant at  $\alpha = 0.05$ , level. ( $p \leq 0.01$  \*,  $p \leq 0.001$  \*\*, \*\*\*:  $p \leq 0.0001$ ).

## VIII. Intrinsic & Extrinsic Barriers To Well-Care Visits, Child vs. Adult comparisons (Cont.)



LAC Child MCAL Pooled % 2006-2010	LAC Adult MCAL Pooled % 2006-2010	BARRIER	REASONS FOR NOT GETTING WELL-CARE
17.4% <sup>***</sup>	5.1%	Extrinsic	h.7 The doctor's office or clinic is not clean and safe.
16.6%	16.8%	Intrinsic	g.8 The appointments are too far in the future.
15.5%	17.9%	Intrinsic	h.1 I / We cannot find a doctor that my child and I both like.
12.5%	13.7%	Extrinsic	g.4 We cannot find or afford transportation to the doctor's office.
11.4% <sup>*</sup>	5.5%	Intrinsic	g.12 I cannot find my child's Member Identification card.
10.0%	7.7%	Intrinsic	g.5 I / We have to change buses or trains too many times to reach the doctor's office.
10.0%	14.8% <sup>**</sup>	--	h.12 Other reason.
9.7%	15.0% <sup>***</sup>	-	g.13 Other problem.
9.2%	16.6% <sup>***</sup>	Intrinsic	h.6 I can't afford for my child to be sick right now.
8.2%	12.8% <sup>**</sup>	Intrinsic	h.4 I / We don't have time to look for health problems that might not exist.
7.9%	8.2%	Extrinsic	g.3 I cannot find or afford child care for my other children.
6.6%	5.9%	Intrinsic	h.11 The doctor or nurse gives health advice that is hard to follow.
5.5%	4.1	Intrinsic	h.8 My child's doctor or nurse has questions and advice about personal or family choices that I do not want to discuss.
3.8%	3.5%	Intrinsic	h.9 The doctor or nurse finds health problems that we cannot do anything about.

Tests w/i rows: **Significantly lower** , **Significantly higher** , Data pooled 2006-11. Percents: Diff. of prop. test; averages: t-test; ( $\alpha=0.05$ ,  $df=5$ ).

\* = Breslow-Day test(Homogeneity or OR) was significant at  $\alpha = 0.05$ , level. ( $p \leq 0.01$  \*,  $p \leq 0.001$  \*\*, \*\*\*:  $p \leq 0.0001$ ).

## IX. Recap of Learning Objectives



1. Analyze reasons why patients report not adhering to recommendations on getting well-care visits (HEDIS).

Differentiate *intrinsic* causes (choices and priorities) versus traditional barriers (delay, distance, language, discrimination).

2. Evaluate patients' self-reported reasons for non-adherence to medical advice regarding checkups in light of behavioral science models regarding intrinsic and extrinsic motivators.

Intrinsic vs extrinsic causes point to quite different solutions.

- Extrinsic barriers require intervention in delivery systems.
- Intrinsic barriers suggest interventions focused on the membership: health education on risks and rewards, and motivation/incentives.

3. Describe ways to adapt patient satisfaction surveys (CAHPS) to identify actionable reasons for patients' non-adherence to clinical guidance.

Patient adherence is a behavior. Acknowledging that the patient is an expert source on his/her own reasons for missing well-care visits, the CAHPS member experience survey is an appropriate vehicle for interviewing members regarding their reasons for not getting well-care.

## Recap of Learning Objectives (Cont.)



4. Discuss methods to design health promotion interventions to improve patient compliance based on models from the social and behavioral sciences.

Health promotion must first focus on “activating” the doctor to see the patient as a partner in treating the patient.

And then on then “activating” the patient with the knowledge, skills, abilities, beliefs, and desires necessary to take actions to maintain and improve health.

5. Evaluate methods to design provider training and incentives to improve member compliance, and note the strengths and limitations of rational economic and financial incentives.

Puts the problem on the patient or doctor to identify and solve barriers.

Persuades patients on the margin, but a small incentive is rarely sufficient to overcome traditional barriers (delay, travel distance, cost, language, etc.).

Overpays already-compliant members and underpays those with serious barriers.

Compliance may evaporate when the incentive money runs out.

# Actionability



- Support of senior management is key to making CAHPS actionable.
- Educate patients on the importance of keeping routine well-care visits.
- Educate patients on parents on awareness of risk for keeping and setting age appropriate care, tests, treatments, and screenings that occur as part of well-care.
- Provide trainings that teach nurses and staff how to easily schedule routine visits for youth and adult patients.
- Provide patient sensitivity training sessions for PPG and office staff.
- Create incentive programs that reward PPGs for remodeling and maintaining clean safe clinics.
- Create audit tools for evaluating the cleanliness and safety of PPGs clinics.



## Support of Senior Management Is Key to Making CAHPS Actionable

- Exemplary memo from a CEO to a Chief of Operations prioritizing CAHPS.
- Key elements: *Creates requirement for analysis, objectives, targets, and management accountability. Ties compensation to measurable performance improvement.*
- Sender eventually became Deputy Administrator of CMS Center for Strategic Planning.



### EXECUTIVE ADMINISTRATION

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November 29, 1999

TO:           [...]  
FROM:        [...]  
SUBJECT:    **CAPHS 2.0 Survey**

Please analyze the results of the CAPHS 2.0 Survey. You will see there is significant room for improvements. Please use this survey to develop specific improvement goals and objectives.

I would like measurable improvement in key result areas. Prepare your 2000 goals and objective targets and establish management responsibility. Improvement in key member satisfaction areas will be part of your Division's pay for performance compensation in 2000.

Attachment

## Opportunities going forward – Potential actions by process owners and other stakeholders



In an economic environment of tight resources (staff, budgets), actions should focus first on targets of opportunity: Improvements piggybacked on projects and processes that will be occurring anyway.

Information venues:

- Place pediatric-related content on annual surveys required by agencies.
- Present findings to internal and external committees. For seniors, the Utilization Management committee is an important venue because it covers case management services, and authorizations for specialists and other treatments used more heavily by pediatric patients.
- Member newsletters may help educate members how to navigate the system: How to use services like Nurse Advice Lines to help determine which conditions need urgent attention, and which conditions can be dealt with in a primary care setting.
- Make members aware of Company website and information portals.

# Ways to improve health services through Surveys and Analysis of Administrative Data



Administrative variables are available for drilldown to identify barriers for various demographic groups:

- RCAC region, SPA, age, ethnicity, zip code, SES, PPG.
- Target large under performing groups for intervention.
- Compare under performing groups with primary plan members.
- Pool data across multiple survey years to increase sample size and power of your test.

Add flag variables classifying members covered by special programs or utilizing program services:

- Protect patient anonymity by categorizing variables that put patients at risk.
- Add conceptual supplemental questions to CAHPS survey which measure behavioral causal relation to outcome variables.

# Contact Information

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## Related briefings:

- **Patient-Guided Quality Improvement: Linking CAHPS to HEDIS and Other Measures of Health System Performance.** APHA 2011, 10/30/2011, Session 2074.0, Medical Care Section Poster Session #3– Quality Improvement.
- **Thinking CAHPS: Using Patient Surveys to Correlate Providers’ Cultural Competence with Patients’ Health Literacy, 2008 – 2011.** APHA 2011, 10/30/2011, Session 2073.0, Medical Care Section Poster Session #2: Cultural Competence and Health Literacy.

Online discussion on using CAHPS to improve quality of service:

[http://groups.yahoo.com/group/member\\_satisfaction](http://groups.yahoo.com/group/member_satisfaction)  
[member\\_satisfaction-subscribe@yahoogroups.com](mailto:member_satisfaction-subscribe@yahoogroups.com)

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