Accreditation of Medi-Cal, Healthy Kids and Healthy Families Program.

Patient-Guided Quality Improvement: Linking CAHPS to HEDIS and Other Measures of Health System Performance

Session: **2074.0, Medical Care Section Poster Session #3**
Section: **Medical Care**
Topic: **Quality Improvement**

October 30, 2011

S. Rae Starr, Senior Biostatistician
Healthcare Outcomes & Analysis
L.A. Care Health Plan, Los Angeles CA

L.A. Care HEALTH PLAN®

Presenter Disclosures

S. Rae Starr

(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.

II. Background on L.A. Care Health Plan.

III. Using HEDIS and CAHPS for Measuring Healthcare Quality.

IV. Behavioral Underpinnings of Contemporary Medicine.

V. Actionability: Using CAHPS to Guide the Design of Quality Improvement Projects.

V. Methods for Survey Contracting to Improve Value of CAHPS Results.

VI. Recap of Learning Objectives.

Appendix. Sharing Knowledge on Quality Improvement.

I. Learning Objectives

1. Explain the linkage between service quality (measured on CAHPS) and clinical quality of care (measured on HEDIS).
2. Explain how to use CAHPS findings to guide the design of quality improvement projects.
3. Describe methods for effective survey contracting, for more meaningful surveys and CAHPS reports that engage and inform key process owners.
4. Discuss the impact of patient satisfaction on retention and other measures of system performance and quality.
5. Discuss complementary uses of the Health Plan CAHPS (HP CAHPS) and newer instruments in the CAHPS family of surveys.

II. Background – L.A. Care Health Plan

Large, diverse membership in Los Angeles, California:

- Mostly Medicaid, urban, 2/3rd 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. Using HEDIS and CAHPS for Measuring Healthcare Quality

***Quality of Care:* HEDIS refers to the Healthcare Effectiveness Data and Information Set.**

- HEDIS is a set of indicators of ***quality of clinical care*** provided to patients.
- HEDIS is developed and maintained by the National Committee for Quality Assurance, a private, not-for-profit organization that accredits health plans and providers of healthcare services.

***Quality of Services:* CAHPS refers to the Consumer Assessment of Healthcare Providers and Systems.**

- CAHPS is designed to capture health plan member experience regarding the *quality of services* that they receive from health plans and clinics.
- CAHPS is developed and maintained by the federal Agency for Healthcare Research and Quality (AHRQ) through contracts with research organizations.

HEDIS and CAHPS are typically administered annually for health plans.

- In Medicare and Medicaid, HEDIS and CAHPS are often required by the state and federal agencies that fund those programs.
- Results are often *publicly reported* to inform patients, employers, agencies, and other stakeholders in selecting and assessing health plans.

IV. Behavioral Underpinnings of Contemporary Medicine

Health care has increasingly focused on diseases where patients' choices and behavior play a core role in the disease process and the efficacy of treatment:

- Hypertension, heart disease, diabetes, obesity, etc.
- Treatment plans increasingly recognize patient as a partner to the doctor:
  - Diet, exercise, rest, smoking cessation.
  - *Self-testing, administering therapies, injecting medications,* sometimes deciding dosage within doctors' guidelines.
- Failure to engage patients' compliance drives *outcomes* and *costs*.
  - HEDIS assumes compliance is *endogenous* (driven by payers & doctors).
  - Explore and address patients' reasons for non-compliance in the CAHPS survey that health plans conduct annually in parallel with HEDIS.
  - CMS, state agencies, and large employers use and trust HEDIS and CAHPS together to rate and select providers and health plans.
  - CAHPS gets less emphasis in incentive programs and scores -- but taps into the behavioral roots driving various HEDIS measures.
- Analyzing impact of service quality (CAHPS) on patients' *willingness-to-comply* with clinical guidelines and doctors' advice.
  - Findings: *Reasons of personal choice* far outnumber traditional access barriers as reasons for not getting routine care and check-ups.

V. Actionability: Using CAHPS to Guide Design of Quality Improvement Projects

Intrinsic barriers strongly outweigh *extrinsic (traditional) barriers to patient compliance* in L.A. Care's Medicaid population.

Implications:

- Triage *intrinsic barriers* to health education solutions.
  - Behavioral change is slow and uncertain.
  - Requires non-trivial staff time and cost, but is better than having no solution.
  - Take inventory of all touch-points with the member: inbound calls for information; newsletters; outreach and satellite offices (family resource centers).
- Triage *extrinsic causes* to line departments handling the functions that address traditional barriers:
  - Provider relations and contracting (delays, distance, hours, communication, clinic staff customer service skills, access to specialists).
  - Facility Site Review (clinic safety, access, and cleanliness).
  - Member Services (customer service, eligibility cards).
  - Utilization Management (speed of authorizations).
  - Culture and Linguistics (interpreter access).

Ways to Improve Information Bandwidth from CAHPS

Limitations of the CAHPS Health Plan survey (HP CAHPS):

- Infrequent: Once a year.
- Low sample size: Designed to compare health plans -- not for drilldowns to contracted provider groups, clinics, or doctors.
  - *Contract for postcard reminders and for 8-12 telephone callbacks rather than 3.*
- Conducted anonymously to encourage patients to answer the survey and respond candidly. Limits the ability to drilldown and do causal analysis.

Include Supplemental Questions and Supplemental Data:

- *Ask regarding barriers to complying with clinical guidelines measured in HEDIS.*
- *Add data on patients' exposure to programs and services, to aid in evaluation.*

Complement CAHPS Using CAHPS Clinician & Group Survey (CG CAHPS):

- Frequency: Can be offset from HP CAHPS and supplemented to measure similar domains – effectively doubling the frequency.
- Aggregates to much stronger sample size than HP CAHPS.
- Do member-identified surveys. (Use CASRO guidelines to protect members.)
- (Drilldown below medical group level is expensive. Explore pooling over time.)

POOLING CAHPS DATA TO INCREASE STATISTICAL POWER

- **CAHPS samples are usually powered to compare health plans, not compare sub-groups:**
  - Annual samples are rarely large enough for drilldowns to identify targetable groups of patients or providers, or population segments.
- **Pooling samples across years increases statistical power:**
  - Pros: Permits analysis to identify causes of problems, and where to apply effort and resources to improve services that health plan members receive.
  - Cons: Pooling by year, reduces ability to use trend information; and requires additional methods and tests to adjust significance and de-confound any effects introduced by composing artificial samples across years.
- **Adjustments for pooling across years:**
  - Testing for association of independent variables (exposure to programs, healthcare systems, etc.) against CAHPS measures of service quality.
  - Examining 2x2 cross-tabulations comparing likely causes or drivers against those measures, across levels of "Year" to look for anomalies: Years in which the association is reversed or is driven by a single year or sample.
  - Cochran-Mantel-Haenszel approach to de-confound by survey year – adjusting p-values to control for effects of pooling samples over time.
  - Breslow-Day and Zelen tests to confirm whether confounding is present.

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

November 29, 1999

TO: [...]

FROM: [...]

SUBJECT: **CAPHS 2.0 Survey**

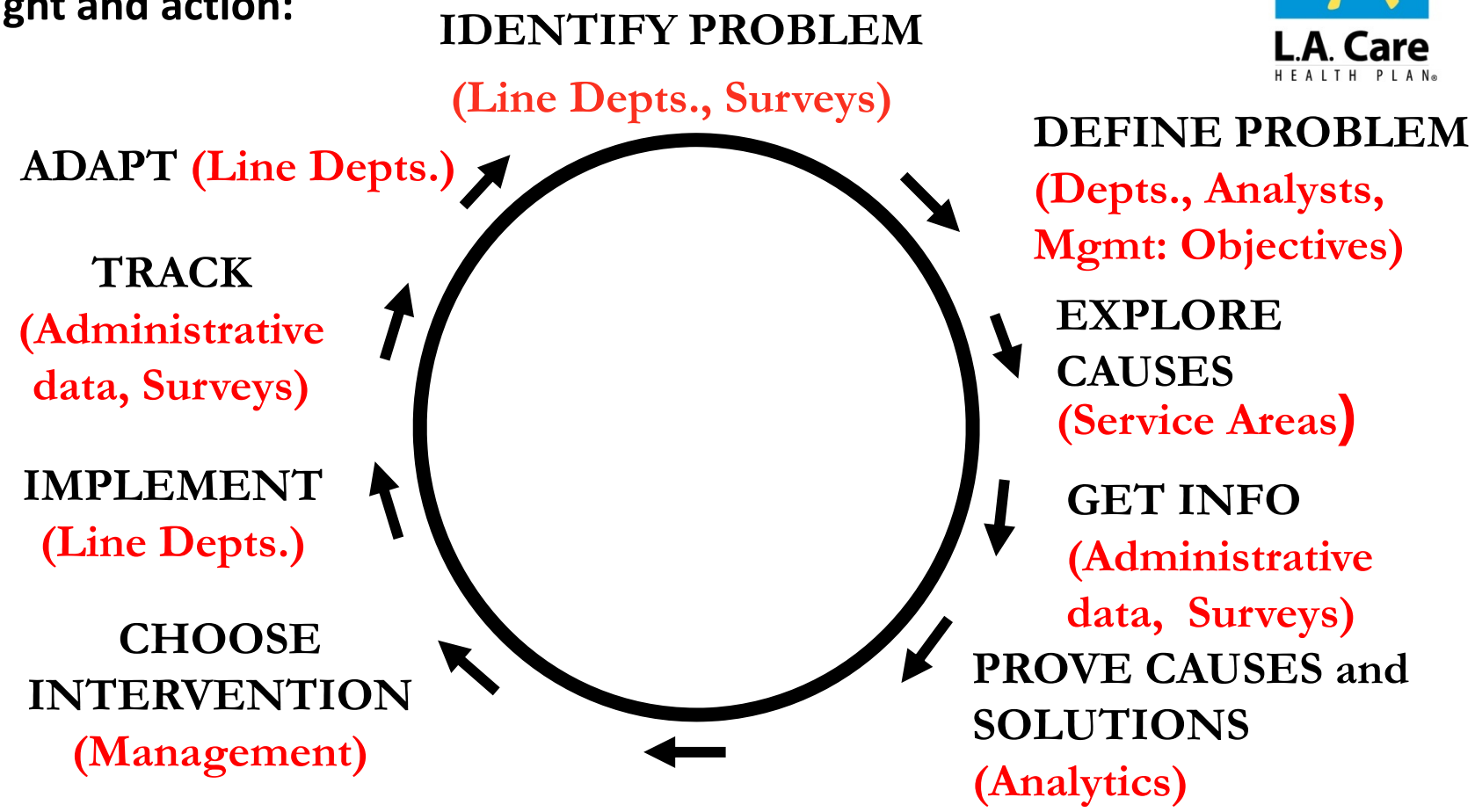
Please analyze the results of the CAPHS 2.0 Survey. You will see there is significant room for improvements. Please use this survey to develop specific improvement goals and objectives.

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

Continuous Quality Improvement (CQI) Cycle

Functional areas in the health plan or agency are key sources of insight and action:



Inventory These Insertion Points in Organizational Processes to Get More Value from CAHPS and HEDIS Findings

Levels of Continuous Quality Improvement (CQI) intervention:

- 8: Apply measures in staff performance reviews and compensation.
- 7: Staffing requisitions, position descriptions.
- 6: Incorporate findings into *contracts and audits toward Corrective Action Plans.*
- 5: Use findings to revise practices captured in *policies and procedures.*
- 4: Incorporate findings into *incentives for contracted entities*.
- 3: Incorporate findings into interventions and redirection of ongoing programs.
- 2: Report results to departments having touch-points with members & providers:
  - 2.i *Push info & actions out to point-of-service inside clinic, pharmacy or lab.*
  - 2.h Clinics, hospitals, and internal departments.
  - 2.g Provider groups, medical service organizations (MSOs).
  - 2.f Contracted health plans.
  - 2.e Committees of the Board.
  - 2.d External committees with contracted entities overseen by departments.
  - 2.c Senior management.
  - 2.b Internal quality committees.
  - 2.a Departmental debriefs (directors, managers, staff).
- 1: Measuring and tracking (without action…but at least collecting data).
- 0: No systematic collection or use of information on quality of care and service.

L.A. Care HEALTH PLAN

For a Healthy Life

VI. Line Items in a Model RFP and Contract to Maximize Survey Value

Standard boilerplate: (Items in **bold** provide the most leverage for actionability.)

0. Samples, over-sample, mode (mail+phone), address/phone # scrub, language (English, Spanish), survey costs, printing/binding reports, etc.

Additional line items in Scope of Work to enhance value & actionability:

1. **Contract for postcard reminders and seek 12+ phone callback attempts.**
2. **Telephone bank operating hours** (M-F, XX am to XX pm, Saturday/Sunday hours).
3. Proportionally stratify by sub-contractor to raise precision. (NCQA waiver.)
4. **Add Supplemental Questions to explore causes for weaker scores.**
5. Correlation matrices showing what and who drives satisfaction.
6. Convert data from other CAHPS surveys (prior years, state agency surveys).
7. Trending current plus two years of CAHPS data.
8. Significance testing among columns and bars in reports and banner tables.
9. Segmentation analysis: Product lines, delegated entities, regions, CCC, etc.
   - **Pooling to improve sample sizes when testing/comparing contracted entities.**
10. Reports saved in editable MS-Word or PPT or PDF format.
11. **Banner table layouts ($xx per table, # banner columns):** Determines what crosstabs and analyses can be ready off-the-shelf to answer projects' design questions.
12. ASCII fixed-format data & codebook: variable & value labels, m.d., columns/width, data type.
13. **Data in standard statistical package formats** (SAS, SPSS, Stata, etc.).
14. Include call history in datasets: full sample – not just the completes.
15. **Append external data. (Render anonymous via a sampling frame cell size rule.)**
16. **Assure future data merges & transfers of data at fixed CPI-adjusted cost.**
17. **Provision to transfer IDs and response data to next survey firm as data custodian.**
18. **Open-ended questions** (English, Spanish): Keypunch *full* responses (un-translated).
19. Risk-adjusting? Other weighting to correct for sampling error, non-response error?
20. **Optional funds for *ad hoc* tabulation and scope changes w/o re-contracting.**

VII. Recap of Learning Objectives

1. Explain the linkage between service quality (measured on CAHPS) and clinical quality of care (measured on HEDIS).

   Bridge: Many HEDIS measures are actually measures of *patient adherence, hence of doctors' efforts to persuade patients to comply with guidelines on well-care, treatments, medications, etc.*

2. Explain how to use CAHPS to guide design of quality improvement projects.

   Triage findings to process owners: Is the patient non-adherent due to *intrinsic barriers* (solve via health education) or due to *extrinsic barriers (systemic barriers)?*

3. Describe methods for effective survey contracting, for more meaningful surveys and CAHPS reports that engage and inform key process owners.

   Contract for Supplemental Questions that tie to HEDIS, and merge data on patients, providers, visit history, and interventions, for causal analysis.

4. Discuss the impact of patient satisfaction on retention and other measures of system performance and quality.

   Knowlton (2010): Service quality (measured on CAHPS) impacts member retention.

5. Discuss complementary uses of CAHPS Health Plan Survey (HP CAHPS) and newer instruments in the CAHPS family of surveys.

   Consider CAHPS Clinician and Group Survey (CG CAHPS) survey to improve frequency, sample size, attribution, and drilldown-analysis closer to point of service.

Contact Information

S. Rae Starr, M.Phil., M.OrgBehav.
Senior Biostatistician, L.A. Care Health Plan
RStarr@LACare.org, rae_starr@hotmail.com
213-694-1250 x-4190

Related briefing:

Behavioral science underpinnings for addressing barriers to patient adherence on HEDIS well-care visit measures: evidence from patient surveys, 2006-2011. APHA 11/01/2011, Medical Care, Session 4395.0 Social Sciences in Health: Cultural & Clinical Interfaces.

Online exchange on analytics and quality improvement:

http://groups.yahoo.com/group/member_satisfaction
member_satisfaction-subscribe@yahoogroups.com