3rd Party Credibility and Quality Assurance

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Agenda

- The importance of 3rd party credibility
- Why have quality assurance?
- What are the potentials for bias in a HERS QA program?
- E-Star's Quality Assurance Program
- Results
- QA is necessary, but not sufficient condition for 3rd party credibility

The importance of 3rd party credibility:

- EPA, Fannie Mae, DOE need confidence in “intra-coder reliability”
- Emissions credit trading market will not tolerate much variation; not a given that modeling will be allowed
- 3rd party credibility: what customers pay for when buying E-Star Certified Ratings

There is potential for bias in any HERS program:

"If men were angels, we wouldn't need government."

James Madison

Potential Bias #1

Raters operate as independent companies: without oversight, rigor decreases over time. Raters with high volume may start taking shortcuts. Potential for lack of “intra-rater reliability” in data collection.

Counteraction to Bias #1

Ongoing monitoring of and feedback to raters; field inspections by a 3rd party WITH NO VESTED INTEREST in rater/client relationship.

Potential for Bias #2

Most raters are paid by customers, not by a 3rd party. Creates bias in favor of client to demonstrate code or brand label compliance, or to maximize potential mortgage benefits.

Counteraction to Bias # 2

Random site inspections by a 3rd party with no vested interest in rater-client relationship; independent certifying entity has authority over rater’s status.

Potential for Bias # 3

Some raters are contractors who perform upgrades for clients. Creates potential to make recommendations that favor services offered by rater.

Counteraction to Bias # 3

Consumer disclosure forms disclose offerings of rater help but are not sufficient; site inspection by a 3rd party with no vested interest in rater-client relationship, with careful analysis of proposed costs of upgrades. Database to be kept on typical market costs for upgrades.

Potential for Bias # 4

HERS providers are paid processing fees by raters, which fund QA efforts. HERS provider may be less rigorous in its review of high-volume raters out of fear of losing rater’s volume.

Counteraction to Bias # 4

- Change pricing structure between HERS provider and rater, so rater pays provider a flat fee (creates incentive for rater to increase volume and decrease provider per-rating cost) and/or
- HERS provider finds other funding sources to support ratings and rating QA, possibly eliminating fees to raters entirely.
- “Peer review” fraught with inherent conflict of interest.

E-Star's First Annual QA Report

- E-Star's strategic plan emphasizes 3rd party credibility
- Exercise of documenting our procedures valuable
- E-Star Board our outside entity to whom we are accountable

Rater Agreement requirements:

Ongoing in-house review of ratings, and periodic field inspection with

- 80+ points: no more than 1 point deviation
- 70-79: 1.5 points deviation
- 60-69: 2.0 points deviation

Ongoing in-house review of ratings:

•Software halts processing for some errors

•One out of 10 ratings reviewed, plus any with inputs that generate a field or form level warning

Ongoing in-house review of ratings:

- Nov-Dec 2003: 137 out of 403 processed were reviewed (33%).
- 11 errors detected and corrected (8%).

Field Inspection Rating Results

Rater	1	2	3	4	5	6
Ratings Processed	66	610	81	10	74	3
Rater score	88.3	89.2	88.1	77.8	84.1	78.7
QA Staff Score	88.2	89.2	87.9	77.0	84.0	79.2
Difference	.1	.0	.2	.8	.1	.5

Improvement on internal validity for next year’s results:

•Our QA doesn’t automatically lead to 3rd party credibility. Has to be made public.

•Hawthorne Effect: people perform differently (better) when they know they are being observed. Trick is to harness the power of the Hawthorne effect!

•Will need to come up with a protocol for high volume raters

Implications:

- Right role of RESNET? Intra-coder reliability within one HERS provider; what is it across all HERS providers?
- QC for raters translates to QC of contractor programs?
- Emissions credit trading?

See report at www.e-star.com

E-Star™
Advancing Energy Efficiency in Housing

Energy efficiency: the next tornado?

"[Paradigm shifts] begin with a new category of product that incorporates breakthrough technology enabling unprecedented benefits. It is immediately proposed as the natural replacement for a whole class of infrastructure, winning early converts and enthusiastic predictions of a new world order. But the market is a conservative institution, and it presses back against the new changes…For a long time, although much is written about the new paradigm, little of economic significance happens. Indeed, sometimes the innovation is never embraced, falling back into some primordial entrepreneurial soup…But in many other cases there comes a flash point of change when the entire marketplace, under the pressure of continually escalating disequilibrium in price/performance, shifts its allegiance from the old architecture to the new."

Inside the Tornado, Geoffrey A. Moore

Will the HERS infrastructure, and related energy efficiency services and products become the next tornado, or will we slip into the primordial entrepreneurial soup? How can we predict?

“The best way to predict the future is to create the future.”

Gandhi