

Database of Evaluation Findings and Research Results

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Introduction

An important issue facing professionals in Demand-Side Management involves the accumulation and retention of information acquired through evaluations examining similar programs and issues. Information on lessons learned in program implementation and the findings of evaluations are currently difficult to uncover in the literature. There is no data clearing house that can be easily accessed by DSM professionals that provides information on the results of programs undertaken by utilities across the country. To address this issue, a database consolidating the results of roughly 100 DSM evaluations has been developed. This database includes information on program type, targeted sector, evaluation findings, and evaluation method, in addition to other data. The database was designed to be useful in conventional database searches and analyses, as well as to be consistent with the application of meta-analytic techniques.¹

The 100 evaluation studies in the database include both process and impact evaluations of DSM programs in Wisconsin. The reports are classified according to nine different evaluation types. For each evaluation type, a determination was made regarding the information that would be useful in a database of evaluations. The general categories of information included program information, evaluation methods, and evaluation findings and recommendations.

A database containing information from the DSM evaluations and reports was constructed using PARADOX software, with a KMemo attachment. The recorded information includes a report abstract, a description of the program evaluated, the study design, sample description and sample size, as well as a listing of the issues addressed and report findings, including the location of findings within each report. Key words from each of these categories are summarized in one field to allow for more efficient database searches.

Database Development

The database development and preliminary analysis involved four steps:

- One--DSM program evaluations were collected from Wisconsin utilities and energy-related organizations. 110 studies were received; however, some were not related to DSM evaluation research (e.g., appliance saturation surveys) and were excluded, leaving 95 reports.
- Two--A "coding sheet" was developed to collect relevant information from each report. The coding sheet was developed in conjunction with the database structure and was modified as reports were received and additional elements of interest were identified. After each report was assigned a unique index number, it was classified by report type, program type and targeted sector. Table 1 provides examples of some of the possible categories within each classification.
- Three--Additional information from each report was recorded on the coding sheet and a study abstract was written. This information was input into the database.
- Once the database was completed, the more quantitative reports were selected for further summarization, analysis, and consideration for use in a meta-analysis case study. The more extensive report summaries that were written for these reports include a more detailed discussion of each study's research design, research methods and major findings.

Database Applications

The database has enabled Wisconsin utilities to quickly and efficiently identify evaluations and programs in which

Table 1. Report Classification Categories

<u>Report Type</u>	<u>Program Type</u>	<u>Targeted Sector</u>	<u>Eligible Measures</u>	<u>End Uses</u>	<u>Research Design</u>
Behavioral Impact Evaluation	Audit	Agricultural	Appliances	Central Air Conditioning	Billing Data Analysis
	Dealer Incentive	Apartment	Cooking	Compact Fluores.	Engineering Analysis
Consumption Impact Evaluation	Direct Load Control	Commercial/Industrial (C/I)	Electric Rates	High-Eff. Furnace	Focus Group
Process Evaluation	Engineering Study	Commercial	Lighting	Insulation	Mail Survey
Marketing Study	Fuel-Switching	Industrial	Motors	Refrigerator	On-site Survey
Survey Results	Information	Residential	Space Cooling	Set-Back Thermostat	Telephone Survey
Benefit/Cost Analysis	New Construction	All/Other	Space Heating	Weatherization	
Other	Rebate			Storm Windows	
	Shared Savings			Water Heater	
	Weatherization			etc.	

they are interested. The contents of those evaluations are available in the database, so an interested party can determine whether the evaluation itself would be useful to have, or can identify the specific section of the report that contains the needed information.

For example, one search involved exploring the energy savings that had resulted from Wisconsin residential refrigeration programs. A search was conducted that first identified evaluations of such programs and second determined which evaluations estimated the resulting energy savings. Because the location of those results within each report was provided, the results were easy to extract from the reports. The database is being used in a similar fashion to identify reports for an ongoing project that involves applying meta-analytic techniques to synthesize and analyze research results.

The actual computerized database resides at the Wisconsin Center for Demand-Side Research.

Endnote

1. The development of this database and potential applications of meta-analysis to DSM evaluations are described in more detail in Greene and Violette, 1992.

Reference

Greene, P. A., and D. M. Violette. March 1992. *Review of Wisconsin DSM Program Evaluations: Database of Evaluation Findings and Approaches for Synthesizing Research Results*, (EPRI RF-3269-01) Electric Power Research Institute, Palo Alto, California.