

# Targeting the Information Needed



*Office of Inspector General  
Office of Evaluation and Inspections*

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# Introduction

*In the Office of Evaluation and Inspections' (OEI) Technical Assistance Guide #1: Focusing the Inspection, we determined the audiences, topics, contexts, and scope of our planned Inspection. We accomplished this by adhering to a number of guiding principles and by following six clearly defined steps.*

*At the end of Guide #1, we were able to specify very clearly the purpose, objectives, and issues of our Inspection.*

*Completing these six steps, however, brought us only halfway to being able to design the Inspection. While these steps helped us to specify **what** the Inspection will address, they did not help us to determine **how** the Inspection will proceed. What information will we need? From what sources? How can it best be obtained? These questions (and others) must also be answered before we can design the Inspection.*

*Figure 1 shows nine main questions to be answered before designing an Inspection. As we have learned, the first three questions—the purpose, objectives, and issues of the Inspection—all flow directly from each other, and Guide #1 discussed ways to answer these three questions.*

*This guide discusses five of the remaining six questions: (1) types of information needed, (2) types of information sources needed, (3) specific information sources needed, (4) approaches to sampling specific sources, and (5) methods for gathering information from specific sources. The last question, (6) analysis plans, will be discussed in Guide #5: Analyzing the Information Gathered.*

*As with the first three questions, these remaining six questions also flow directly from each other. That is, the answer to each of these questions is determined, to a large part, by the answers to those questions which were addressed earlier.*

**Figure 1**  
**Nine Main Questions for Designing an Inspection**

**Purpose?**

*Guide 1*

**Objectives?**

*Guide 1*

**Issues?**

*Guide 1*

**Types of Information Needed?**

*Guide 2*

**Types of Sources?**

*Guide 2*

**Specific Sources?**

*Guides 2 & 3*

**Sampling Strategy?**

*Guide 2*

**Methods for Gathering Information?**

*Guides 2 & 4*

**Analysis Plans?**

*Guide 5*

## Determining the Types of Information Needed

As Figure 1 indicates, the first task in designing how the Inspection will be conducted, is to determine the types of information needed to address the specific issues to be studied. Note that we say the *types* of information needed, not the information itself; the distinction is important.

By “types of information,” we mean the different categories of information which different Inspections must obtain. For example, one Inspection studied how satisfied Social Security beneficiaries are with services they receive from the Social Security Administration (SSA). To address this issue, the Inspection needed to obtain self-ratings of satisfaction, one type of information which we can label as personal *perceptions*.

This particular Inspection, because of the issues it was studying, was not as interested in other types of information such as the *organization and management* of SSA services, the *actual performance* of SSA in delivering these services, nor the *need* for these services in the first place. For other Inspections, though, the situation could easily be reversed, and these could be exactly the types of information which are most needed.

The Inspection of emergency room “patient dumping” focused on the *procedures and operations* of the three Department of Health and Human Services (HHS) offices which investigate such allegations, and on the *actual performance* of those offices in investigating individual cases. For this Inspection, information on perceptions was not needed.

Another Inspection focused on completely different types of information. Because of the particular issues it was exploring, it focused almost exclusively on measuring the *extent of use* of Social Security numbers in the United States. For this particular Inspection, types of information such as perceptions, organization, procedures, and actual performance were relatively unimportant.

The lesson from each of these examples is that the particular *issues* of the Inspection will invariably dictate the particular *types of information* needed for the Inspection. Only by carefully considering each issue and then deciding what type (or types) of information is required can we properly design the Inspection.

While this seems like a simple task, it can be fairly complex, especially when different types of information can address the same issue. For example, the Inspection of patient physical abuse in nursing homes assessed the systems and procedures existing to detect such abuse. Inspections staff could have obtained information about the *design* of such systems and procedures (largely by examining official documents), or they could have obtained information about the *operations* of such systems and procedures (largely by contacting persons directly involved). After carefully considering both the difference in the two types of information (i.e., design vs. operations) and the purpose of their Inspection, staff decided they needed both types of information.

On a practical level, many considerations go into deciding which types of information to obtain. One of the most important considerations is how credible each type of information is to the eventual audiences. Certain audiences might place little faith in personal perceptions, preferring instead to trust a combination of official program descriptions and quantitative performance indicators. Other audiences might feel just the opposite—that numbers can be misleading and that only by visiting local areas and talking with participants can we gain a true qualitative understanding of an issue.

One aspect of credibility is the “face validity” of the types of information being gathered. If a certain type of information is highly credible—that is, if audiences believe without question that it captures what needs to be measured—then that information is seen as valid “on the face of it.” In this situation, the validity of the particular type of information is self-evident and thus highly credible to audiences.

One factor which should not affect what types of information are gathered is the relative ease of convenience of obtaining each type of information. We will see below that convenience *is* a legitimate consideration when deciding the types of sources, specific sources, and methods of obtaining information, but it is *not* a legitimate consideration when deciding the types of information. If a certain type of information is required to address an issue, then it is required—period.

For example, program performance can be determined in at least two different ways. On the one hand, Inspections staff can gather the *perceptions* of program officials, front-line staff, clients, and other knowledgeable respondents. On the other hand, Inspections staff can gather *actual performance* indicators from reporting systems or by testing the program directly. Both types of information are legitimate.

However, for any given Inspection, one type of information is almost always more appropriate than the other, and Inspections staff cannot ignore that fact because of convenience. If the Inspection requires a determination of actual performance, then that type of information must be collected, regardless of the effort required. If, on the other hand, the Inspection requires the perceptions of those involved, then *that* type of information must be collected, even if it is much harder to do so. Otherwise, the Inspection will be answering questions but not the exact questions posed in the design.

# Determining the Types of Information Sources Needed

In the earlier example from the nursing home patient abuse Inspection, we saw that the *types of information* which were needed directly determined what *types of information sources* were needed (see Figure 1). To obtain the designs of systems and procedures, Inspections staff were required to draw on official documents and other written materials. However, to obtain informed understandings of those closely involved, Inspections staff were required to draw on individual persons.

There are basically six different types of sources available to Inspections staff. Each type of source has the capability to provide certain types of information, and each has certain advantages and disadvantages. The six generic types are:

## ***Existing Data Bases***

To obtain quantitative types of information, it is often useful to access the numerical information in computerized data bases. There are innumerable data bases in the U.S.; some are maintained by Federal agencies, some by State agencies, and some by private organizations. Within HHS, it is common for a program office to maintain a management information system (MIS) to capture basic data such as the number of participants it serves, number of services delivered, and costs of services.

Outside of HHS, useful data bases exist in other Federal agencies such as the Census Bureau, in State-connected agencies such as the Federation of State Medical Boards, and in private organizations such as the American Medical Association and private insurance carriers.

## ***Reporting Systems***

Almost every HHS program requires a wide variety of reports on its activities and accomplishments. Some of these reports are quantitative, containing numerical information which may or may not duplicate that information reported into the centralized data bases mentioned above. Other reports are written, and they often follow a standardized format prescribed by Congress or the Department.

Whatever the format, these reporting systems often contain more detailed information than the centralized data base since they are less aggregated. In addition, these reporting systems often have room for in-depth interpretations as well.

## ***Individual-level Records or Files***

Computerized data bases and regular reporting systems often contain a wealth of information about particular services or beneficiaries. Medicaid and Medicare Part B carrier files, for example, contain very specific information about almost every detail of beneficiaries and the services they receive.

However, other data bases are less comprehensive, containing only a few of the most important data elements. In these situations, much more detailed information is sometimes available in the individual-level records or files, and Inspections staff can access these files directly.

### ***Persons or Offices***

For any given issue, there are a number of informed persons within the Department who create an “informal network” of in-house experts in that area. These experts, who usually know each other but who often cannot be identified solely by formal titles and GS levels, are found in other Office of Inspector General (OIG) components (Office of Audit Services [OAS], Office of Investigations [including the Medicaid Fraud Control Unit], and the Administrative Office, especially the division of Legislation, Regulations, and Public Affairs), other staff Divisions (e.g., Assistant Secretary for Planning and Evaluation [ASPE], Assistant Secretary for Management and Budget [ASMB], Legislation, Office of General Counsel [OGC]), in the Secretary’s Executive Secretariat, and in the Operating Division program offices.

Experts can also be found in other Executive branch agencies (Labor, Agriculture, and Housing and Urban Development [HUD] have programs closely related to several HHS programs), in the Office of Management and Budget (OMB), and in the occasional task forces and commissions studying HHS-related issues.

Knowledgeable persons within the Congressional branch can be found in the General Accounting Office, Congressional Budget Office, Congressional Research Services, Office of Technology Assessment, Library of Congress, and on committee staffs.

Outside of the Federal government, there is a vast array of persons who can provide various types of information about an Inspection issue. Relevant associations, outside analysts, State and local agency staff, third-party agents, local providers, beneficiaries and their representatives, community leaders, academic scholars, and journalists are all knowledgeable about different aspects of issues.

### ***Documents***

For any given issue, there are also a number of informative written materials. Documents such as previous studies and reports, speeches, Congressional testimony, reports of Congressional or public hearings, media clippings, academic journal articles, legislation or regulations (actual and proposed), court decisions, budget requests and actual budgets, and administrative directives can provide certain types of information which are hard, if not impossible, to obtain elsewhere.

### ***Direct Experience by Inspections Staff***

A final type of information source is the direct, personal experience of Inspections staff. It is one thing to gather information from second-hand sources such as documents or persons involved in the issues. It is quite another, however, to personally experience the issues being studied.

For example, in the Inspection of the Runaway Youth Hotline, Inspections staff experienced for themselves the operation of the Hotline by dialing the toll-free telephone number and pretending to be runaways in need of help. In the Inspection of Senior Centers, Inspections staff personally observed the conditions of each Center and tasted the food themselves.

To the extent that Inspections staff can place themselves actively into these types of situations, they can gather first-hand information which is both directly relevant and extremely convincing to the eventual audiences for reports and briefings.

When determining which types of information sources are needed, we need to remember that no single type of source is perfect. Records rarely contain all the information we need. Fortunately, it is not necessary to obtain information from only one type of source. Many different types of sources—including existing data bases, reporting systems, persons, and documents—can each provide performance indicators, and it is often helpful to tap into a number of different sources.

A good strategy is to deliberately use different types of sources in a conscious effort to reduce the impact of any unique weaknesses from any one type of source. Documents are usually informative, but they sometimes portray reality as it *should be* rather than as it *is*. Reporting systems usually portray reality as it is, but they do not always provide the story behind the numbers. Persons usually provide the “story behind the numbers,” but they sometimes make claims which cannot be verified. Each type of source provides a valuable piece of the puzzle, but alone their value is lessened.

The typical solution to this problem is to compare information obtained from multiple types of sources. By comparing findings, Inspections staff have more confidence in those which “converge” and can further explore those which “diverge.” This technique is called “triangulation,” an analogy for the way our two eyes allow us to see reality much better than does either eye alone.

# Determining the Specific Information Sources Needed

After determining which *types* of sources are able to provide the information needed for the Inspection, it is then important to determine which *specific* sources to use (see Figure 1). If the Inspection needs to extract data from existing data bases, which ones? If the Inspection needs to examine documents, which documents? If Inspections staff need to hold discussions with specific persons, which persons?

There are often many possible *specific* sources for each *type* of source. That is, there are often several relevant persons, several relevant documents, and sometimes even several relevant data bases for any given Inspection issue. The next Guide in this series, OEI Technical Assistance Guide #3: Specific Sources of Information, discusses 80 sources which Inspections staff might use for a given Inspection. Guide #3 first lists those specific sources available within OEI; it then systematically expands to include sources available from OIG, from other HHS Staff Divisions, from HHS Operating Divisions, from government outside HHS, and from non-government entities.

For this current Guide, these 80 specific sources are categorized in a different way—by five of the six different types of information sources discussed above. (For “Direct Experience by Inspections Staff,” it is, of course, not possible to list specific sources.) Within each type of source, the title of the specific source is listed, along with a number in parentheses. The number in parentheses correlates with the fuller description of the specific source in Guide #3. Thus, to learn more about the second specific source listed below (Technical Report: Medicare Part B Sample File), refer to the fuller description of source 7 in OEI Technical Assistance Guide #3.

## ***Specific Existing Data Bases***

- Data and information sources available to OEI personnel (1)
- Technical Report: Medicare Part B Sample File (BMAD—IV Subset) (7)
- HHS data inventory (18)
- The Potential Use of the Health Care Financing Administration (HCFA) Data Sets for Health Care Services Research (30)
- HCFA's Bureau of Data Management and Strategy—Data Profiles Manual (31)
- HCFA Model 204 Database and Query System (33)
- U.S. Bureau of the Census (43)

## ***Specific Reporting Systems***

- Office of Computer and Information Systems—Application Systems Reference Manual (17)
- Office of the Assistant Secretary for Health Information Policy Council's (HIPIC) Data Sources Inventory (22)
- Federal Information Sources and Systems (48)

***Specific Individual-level Records or Files***

- (part of almost every HHS program)

***Specific Persons or Offices***

- OEI’s mathematical statistician (3)
- Other OEI personnel who have been involved in similar Inspections (5)
- Headquarters program specialists and branch chiefs (6)
- OIG, Office of Management and Policy—Office of Legislation, Regulations and Public Affairs (11)
- OIG User Information Center (UIC) (12)
- ASPE Policy Information Center (PIC) (14)
- ASPE staff (15)
- ASMB Budget Division staff (16)
- Office of the Secretary (OS) Executive Secretariat staff (19)
- Office of General Counsel staff (20)
- Health Information Center, Office of Disease Prevention and Health Promotion (23)
- Office of Minority Health (24)
- President’s Council on Integrity and Efficiency (PCIE) (36)
- Office of Management and Budget (OMB) (37)
- Congress (38)
- Congressional Budget Office (CBO) (39)
- Congressional Research Service (CRS) (40)
- Office of Technology Assessment (OTA) (41)
- General Accounting Office (GAO) (42)
- National Governors’ Association Center for Policy Research—Health Policy Studies (44)
- Intergovernmental Health Policy Project (80)
- State Medicaid Directors’ Association (45)
- U.S. Conference of Local Health Officers (46)
- Commissions/task forces (47)
- American Public Welfare Association (APWA) (50)
- Congressional Quarterly’s Washington Information Directory (51)
- Hospitals (57)
- American Hospital Association (AHA) (58)
- American Medical Association (AMA) (59)
- Association for Health Services Research/Foundation for Health Services Research (AHSR/FHSR) Published Directory of Health Services Research Organizations (60)
- Colleges and universities (61)
- Advocacy groups and their publications (64)
- Foundations (65)
- Think tanks (66)

- American Public Health Association (APHA) (70)
- The Allan Guttmacher Institute (71)
- Center on Budget and Policy Priorities (72)
- Children's Defense Fund (73)
- Food Research and Action Center (74)
- Institute of Medicine (75)
- National Health Law Program (76)
- National Health Policy Forum (77)
- National Rural Health Association (78)
- Washington Business Group on Health (79)

### ***Specific Documents***

- OEI from the beginning (2)
- Notes of important, relevant information from conferences attended by OEI personnel (4)
- Data-Based Resources (8)
- OAS audit reports and OI investigation reports (9)
- OAS and OI workplans (13)
- OIG Semi-Annual Report to the Congress (10)
- National Library of Medicine (NLM) (21)
- Catalog of Publications of the National Center for Health Statistics (NCHS) (25)
- Social Security Bulletin (26)
- Oasis (28)
- Program Operations Manual Systems (POMS) (27)
- SSA Annual Report to the Congress (29)
- HCFA's Health Care Financing Program Statistics Medicare and Medicaid Data Book (32)
- HCFA's Office of Research and Demonstrations—Current Publications Listing (35)
- Medicare publications and tabulations list available from HCFA/BDMS/SISB (34)
- Government Printing Office (GPO) Subscription Service Bulletin (49)
- NEXIS (52)
- LEXIS (53)
- ECLIPSE (of LEXIS) (54)
- LEGI-SLATE (55)
- Commerce Clearing House (CCH) (56)
- Public and university libraries (62)
- Newspaper/magazine/journal articles (63)
- Health Affairs (67)
- Project SHARE (68)
- DIALOG (69)

As we can see, there is an almost-overwhelming variety of possible sources for Inspection information. Which source(s) are selected is determined by two main considerations. First, what sources are most *appropriate* to provide the needed information. In other words, which sources are most complete, most accurate, most up-to-date, and most likely to contain exactly the information needed? This must be the primary consideration if the Inspection is to maintain high credibility with its eventual audiences.

The second consideration for determining which sources to use is which sources are most *convenient* to use. *If* two different sources can provide equally appropriate information for the Inspection, and *if* one source is easier, quicker, or less expensive to access, then it is clearly preferable to use the more convenient source. However, those are two very important “if’s,” and Inspections staff must satisfy both before letting convenience influence this decision.

## Determining How to Sample the Exact Information Sources Needed

Once the specific information sources have been determined, there is one final task before determining how to gather information from each source. From exactly which of the specific sources will information for the Inspection be gathered? For example, staff may determine that a particular Inspection requires them to examine documents (the type of source), specifically State-level program reports (the specific source). However, there are 50 of these State-level reports. Will Inspections staff examine all 50? If not, how will they pick which exact reports to examine?

If staff do inspect all 50 State-level reports (or all of any “population”), they are conducting a *census* of those reports. If staff inspect fewer than 50 reports, then they are examining a *sample* of those reports, and Inspections staff must choose this sample carefully. Developing the sampling plan or sampling strategy is an integral part of what OEI staff do as they develop the Inspection design.

The two basic sampling approaches are ***purposive*** (or judgmental) sampling and ***random*** (or probability) sampling.

Purposive sampling is simply that—sampling with an explicit purpose in mind. If the Inspection were focused on finding the best operating practices currently being used, then the purpose of its sampling strategy might be to choose reports from those States which seem to be the best performers. Staff might then examine those reports for insights to be shared with other States.

Conversely, if the Inspection were focused on finding vulnerabilities in a particular operation, then the purpose of its sampling strategy might be to choose reports from those States which seem to be the worst performers. Staff might then examine these reports for clues about what problems are occurring and why.

The idea behind random sampling, quite the contrary, is to *avoid* skewing the final sample in one direction or another. In its simplest form, random sampling endeavors to give every “sampling unit” (in this case, every State-level report) an equal chance of being selected for review. If the Inspection were focused on describing what is happening across States, then random methods might be used to choose a sample of reports most likely to be representative of all 50 States.

While the concepts behind sampling are simple, the actual techniques themselves require careful thought and can vary with every Inspection. For these reasons, it is important to recognize the importance of developing a careful sampling strategy and to seek expert help in doing so. The expertise available in headquarters staff is a great asset to OEI and should be consulted early and often as the Inspection is designed.

# Determining Methods for Gathering the Information Needed

As Figure 1 indicates, the next-to-last task before writing the Inspection design is determining what methods to use to gather information from each source. Faced with a wide variety of issues to explore and types of information to gather, Inspections staff have developed a big “methodological toolbox” from which they tailor the appropriate method(s) for any given Inspection. Basically, there are nine different methods which Inspections staff use to gather needed information.

## ***Computerized Extraction***

Computerized extraction of information from existing data bases or automated reporting systems. In some instances these data bases and reporting systems are maintained by HHS program offices; in other instances, they are maintained by other government agencies, outside associations, consulting firms, or independent researchers. In all instances, the information is in the form of raw data, some or all of which is needed to address certain Inspection issues.

This method has several potential advantages. One is speed, since data can be gathered quickly once all the arrangements have been made. The process is simply a matter of electronically transferring the data from one system to another, a task which can even be done by telephone under certain circumstances.

Another potential advantage is cost, since the data have already been gathered, examined, formatted, and entered into a computerized system. Since labor costs are the single largest expense for an Inspection, eliminating the need for these tasks can lower the overall cost substantially.

Computerized extraction has several potential disadvantages, though, including that the information obtained was originally gathered for purposes unrelated to the Inspection, and the possible problems in locating, accessing, transferring, and manipulating the computerized information. For these reasons, it is sometimes wise to supplement this method for gathering the information needed for an Inspection. (See References for Further Reading at the end of this Guide.)

## ***Document Reviews***

Document reviews of relevant written materials, tape recording, films, or videotapes. Some of these materials are “primary documents” that is, documents containing information which has not yet been analyzed. Other materials are “secondary documents” such as studies or reports containing previous analyses conducted by others. In either case, the documents themselves are the sources which provide information relating to the Inspection issues.

There are two main reasons why an Inspection might review documents. First, certain types of information can be retrieved *only* from documents. Legislative and regulatory requirements, budget requests, program plans, administrative guidances, and Congressional testimony are notable examples. If the Inspection issues require these types of information, then staff will most likely be reviewing documents.

A second reason for reviewing documents is to corroborate information gathered with other methods. For example, one Inspection studied how the relevant offices of HCFA, OCR, and OIG coordinate their investigations of “patient dumping” cases. Staff observed that the three HHS offices appeared to relate in a certain way, and they were told that “official policy” dictated this relationship. However, this finding became much more convincing when staff reviewed the relevant Memoranda of Understanding among the three offices.

The Inspection on interest-bearing accounts of non-profit grantees also reviewed documents for just this reason. One of the Inspection issues asked to what extent HHS grantees earned (useful) interest on their idle HHS funds, so the Inspections staff requested copies of bank statements. Staff had already surveyed grantee officials regarding their financial practices, but the review of the actual financial records provided an additional level of credibility.

Document reviews can be relatively inexpensive, quick (once all the documents have been identified and collected), and easy to complete. Document reviews are by no means simple, and Inspections staff who review documents generally need special training before doing so. However, these staff generally do not need the specialized skills or equipment necessary for some other methods.

Like the computerized extraction of quantitative data, the main potential disadvantage of document reviews is that the documents were originally developed for purposes other than the Inspection. Thus, information obtained from documents may be somewhat relevant to the Inspection issues, but not directly so. As a result, Inspections often require creative thinking in order to use the information from documents in the best possible ways. (See References for Further Reading at the end of the Guide.)

### ***Record Reviews***

Record reviews of individual-level records or files. In many HHS programs, staff are required to keep some forms of records or files on the individuals served. These records often contain identifying information about the individual, specific reasons for needing the services, actual services received, and, in some instances, benefits gained from the services. By reviewing these records or files, Inspections staff can often obtain unique information which would be difficult, if not impossible, to obtain using other methods.

In an excellent example of this method, the Inspection of Head Start Enrollment and Attendance reviewed actual classroom records for children enrolled in Head Start programs. By painstakingly reviewing enrollment and attendance records for 6,208 different class-months, Inspections staff were able to develop attendance profiles for each Head Start classroom. These attendance profiles record showed that, as a result of illness or other reasons, 18 percent of all Head Start seats were empty on a given day.

Based on this finding, Inspections staff recommended that local Head Start programs be allowed to “overbook” children into the program, much as airlines are allowed to overbook passengers on the assumption that a certain percentage will not appear for the flight. Federal regulations were changed, and the Head Start program overnight became able to serve an additional 13,000 more children at no additional cost. In this example, the information needed to calculate average daily attendance could not have been obtained using any other method and the eventual improvement in the program certainly justified the time and effort required.

The above example illustrates one of the main advantages of reviewing records or files: that the information they contain is often not available otherwise. While extracting data from computerized data bases and reviewing written project reports also yields information on those receiving benefits, this information is usually aggregated across individuals and usually deals with only the major items of interest. To obtain more detailed information (such as daily attendance) on individuals, a case-by-case analysis of records or files is often the most useful method.

Another advantage of this method is the relatively unbiased nature of the information gathered. That is, the needed information is recorded long before Inspections staff begin their reviews, so there is little chance for local program staff to alter the information one way or the other. Of course, information could have been recorded incorrectly in the first place, so Inspections staff need to understand fully how this recording took place, but it is generally safe to assume that any errors in the information are not because of the Inspection.

The main potential disadvantages of this method are the effort involved in reviewing the individual records or files and the possibility that the records or files may not contain the needed information. We have already seen the first disadvantage: it took considerable time and effort to compile daily attendance records for 6,000 Head Start children.

Regarding the second disadvantage, it was lucky that local Head Start projects keep daily attendance records for each child and that this information was exactly what was needed for the Inspection. Had the Inspection focused on the reasons for absence, for example, the records or files might have been useless. (See References for Further Reading at the end of this Guide).

### ***Personal Discussions***

Personal discussions with persons involved in and knowledgeable about the Inspection topic. Every Inspection, regardless of the other methods used to gather information, also involves personal discussions with other persons more involved in the topic.

For some Inspections, these discussions might be limited to those headquarters program officials who are one of the eventual audiences for the findings and recommendations. (See OEI Technical Assistance Guide #1: Focusing the Inspection.) Other Inspections might involve discussions with a wide range of persons: headquarters program officials, local project officials, front-line project staff, recipients of services, community leaders, advocacy groups, national associations, Congressional staff, etc.

These personal discussions can take several different forms:

- *one-to-one in-person discussions* between a single respondent and a single Inspections staff member, usually on the respondent's territory or in neutral territory;
- *group in-person discussions* among several respondents and one or more Inspections staff members, usually on the respondents' territory or in neutral territory (these can also include the specialized form of group discussions known as focus groups);
- *public hearings or community forums* at which one or more Inspections staff listen to a large number of interested respondents present their views and discuss issues involved in the Inspection; and
- *one-to-one telephone discussions* between a single respondent and a single Inspections staff member, usually calling from the regional office headquarters.

The main advantage of personal discussions is the immediacy of the contact between Inspections staff and respondents and the strong personal rapport which can often develop between the two sides. As a result, respondents are sometimes willing to discuss issues and reveal information which they might not feel comfortable sharing if Inspections staff used other, less personal methods.

For example, one aspect of the Inspection of Computer Fraud Perpetrators involved personal discussions with persons who have violated Federal government computer systems for their personal gain. Even though these discussions took place with convicted felons, Inspections staff learned a great deal more than expected about the vulnerabilities of different systems.

Another advantage of personal discussions is that Inspections staff can determine the emotional content behind the responses to their questions. For some Inspections, *what* an individual says is no more important than *how* he or she says it. This is especially true of Inspections which study weaknesses or errors in HHS programs: the frustrations of affected individuals are much easier understood in person than from any other method. Group discussions (including focus groups) are especially good at capturing the emotional content of respondents' answers.

A final advantage of personal discussions is that Inspections staff can pursue interesting leads which arise during the discussion. Respondents may, in the course of answering a question, mention certain information which is not directly related to the question but which is important nonetheless. In fact, this peripheral information is sometimes more important than the original questions! In these cases, experienced Inspections staff always probe into this unexpected information to ensure that nothing important is being overlooked.

There are potential disadvantages to personal discussions. While some respondents welcome the opportunity to talk with Inspections staff, others are much more private and can feel inhibited in a discussion. Also, respondents sometimes present themselves as more knowledgeable, helpful, critical, etc. than they actually are. Therefore, important factual information should always be verified with other methods. Third, if Inspections staff are inconsistent in conducting discussions, the responses will be equally inconsistent. Finally, for Inspections needing many respondents, there may not be enough time, staff, or travel funds for discussions.

Telephone discussions are becoming increasingly important for Program Inspections, and they have unique advantages and disadvantages in addition to those listed above. Perhaps their main advantage is that Inspection leaders can maintain a high level of quality control over the information-gathering process. Team leaders can closely supervise the sampling process, the selection of specific persons at each telephone number, and the conduct of each discussion. In addition, they can review each discussion guide immediately after the discussion and can show Inspections staff how to improve the next discussion.

A second advantage to telephone discussions is their cost-efficiency. Even though telephone discussions are more expensive than mailed surveys (see below), they are far less expensive than in-person discussions, even in-person group discussions. For this reason, telephone discussions can gather more information—from a larger geographic area—for fewer dollars. This is especially true when teleconferencing technology is used to hold telephone discussions with a number of individuals at once.

A final special advantage to telephone discussions is the speed with which information can be gathered. What might take a month or more of in-person discussions can be done within a week using telephone discussions, if they are done efficiently. If Inspections staff enter the responses directly into a computer as they conduct the discussion, even more time can be saved during the analysis phase.

The greatest potential disadvantages of telephone discussions are the loss of some rapport with the respondent and the limitations on the complexity and length of the discussion. Even though a telephone discussion allows more rapport than does a mailed survey (especially if Inspections staff already know the respondent), it does not allow as much personal contact as does an in-person discussion. Also, respondents tire more quickly on the telephone than in person, especially if the topics being discussed are particularly complex. (See References for Further Reading at the end of the Guide.)

### ***Mailed Surveys***

Mailed surveys to carefully selected recipients. For those topics or issues too private for personal discussions, or for those individuals who cannot realistically be contacted in person, responding to written questions may be the most appropriate way to provide information for the Inspection.

In the Inspection on SSA Beneficiaries' Satisfaction with Social Security Services, for example, almost all the needed information was gathered by mailing a survey to a random selection of SSA beneficiaries. Each survey contained a carefully selected set of questions, some of which were identical to an earlier GAO survey to allow for comparisons between the two surveys.

One obvious advantage to mailed surveys is the time saved from visiting or telephoning each respondent. Some Inspections involve over 1,000 respondents, and the time and effort necessary to contact each one personally would simply be prohibitive. Preparing a uniform survey and mailing it to these persons may be a very viable alternative whenever an Inspection needs to contact a large number of respondents.

Another advantage can be the uniformity of responses, provided the survey uses both structured questions and structured answers. (See OEI Technical Assistance Guide #4: Gathering Information.) If so, each completed survey can be analyzed in the same manner, a luxury which eases the problems of data analysis (although it also reduces some of the richness and depth of the information).

The major potential disadvantages of mailed surveys are the mirror opposite of the advantages of personal discussions. In a mailed survey, there is less chance to build a personal rapport, emotions are harder to capture, and interesting leads cannot be pursued. In addition, mailed surveys sometimes require OMB approval, an issue discussed further in Guide #4. (See References for Further Reading at the end of the Guide.)

### ***Personal Observations***

Personal observations by Inspections staff. Tests or demonstrations require that Inspections staff actively become involved with the situations they are studying. A less involved, yet also productive, approach is to observe situations as they unfold. If planned and conducted carefully, expert observations can provide a great deal of rich information.

Contrary to popular belief, observations do not necessarily need to be visual observations. All five senses can be productively used to observe: vision, hearing, smell, taste, and touch. In the Inspection of senior centers, Inspections staff not only watched events at the senior centers, they also listened to conversations, smelled the facilities, and tasted the food served during lunch. Each of these senses provided rich information for the Inspection.

In general, there are four mutually exclusive types of observations, depending on whether the observer announces her role as an observer and whether she participates in the activity being observed:

- During ***transient observations***, Inspections staff announce their roles as outside observers, then briefly observe the situation in a detached manner;
- During ***observing participations***, Inspections staff also announce their role, but they also fully participate in the situation;
- During ***surveillance***, Inspections staff are hidden from participants, and they gather the needed information surreptitiously; and
- During ***participant observations***, Inspections staff do not acknowledge their roles as outside observers, and they participate fully in the situation as would any other participant.

Because the two techniques of surveillance and participant observations each require a certain amount of deception, Inspections staff must carefully consider the ethical implications of gathering information in these ways. The OEI Technical Assistance Guide #4: Gathering Information discusses what factors to consider, and OEI supervisors should always review the use of these two techniques beforehand.

The main overall advantage of observations is the Inspections staff can gather information which has not been filtered by the perceptions of others. Senior citizens may report that food tastes bad and that facilities have an odor, for example, but these are perceptions, not direct experience. These findings become much more immediate if several Inspections staff agree that food *does* taste bad and that the facilities *do* have an odor.

Ironically, this lack of filters is also the main potential disadvantage of observations. Because Inspections staff are new to the situation, they may sometimes misinterpret what they are observing. To understand fully, Inspections staff may also need to conduct discussions with knowledgeable insiders or to review previous studies or reports. For this reason, observations are typically used in conjunction with other information-gathering methods. (See References for Further Reading at the end of this Guide.)

### ***Unobtrusive Measures***

Unobtrusive measures. This special form of observation differs from personal observations in that Inspections staff do not personally observe the situation or behavior as it occurs. Instead, they return later to measure the after-the-fact indicators of what has occurred.

In the Inspection of senior centers mentioned above, for example, Inspections staff attended lunches in order to determine whether senior citizens ate the food. This was certainly an effective method, but it also required that Inspections staff be at specific sites at specific times of the day.

As an alternative, Inspections staff could have examined the trash cans after lunch and judged, perhaps by recording and weighing the contents, how much was eaten. In fact, given the difficulty of watching numerous people eat lunch at once, this unobtrusive measure might be more accurate than direct observations in such a situation.

Unobtrusive measures can take a number of highly creative forms, and they are limited only by the imagination of Inspections staff. Officials at the University of Virginia measured *erosion* when they delayed installing permanent sidewalks until students had worn down enough grass to indicate just where sidewalks were most needed. Museum officials also measure erosion when they determine the most popular paintings by how often the floor tiles in front of each painting need to be replaced.

If the Inspections staff had weighed the leftover food from the senior citizens lunch, they would have been measuring *accretion*. This is also the case if Inspections staff measured satisfaction with services by the extent of vandalism of offices, graffiti in toilets, or letters of complaint.

*Equipment* and *dress* can be important unobtrusive measures. The Inspection of senior centers also recorded the types of cars found in the parking lot during the lunch programs. Since the free lunches are subsidized by the Federal government, the Department was quite interested in the finding that a sizable number of recipients drove up in expensive cars. Had the Inspection also recorded the dress of these drivers, the finding might have been even stronger.

Unobtrusive measures are especially useful because they are almost completely non-reactive. That is, grass has already been worn down, food has already been placed in trash cans, and cars and clothes have already been bought. This is especially helpful when measuring indicators which are difficult or impossible to observe at the time. Inspections staff simply have to measure the indicators afterwards.

As with personal observations, though, Inspections staff need to be careful not to misinterpret what they measure. Perhaps senior citizens did not eat their lunches because the afternoon birthday party would be serving an especially delicious chocolate cake. Again, Inspections staff usually supplement the unobtrusive measures with other methods whenever possible. (See References for Further Reading at the end of this Guide.)

### ***Special Tests or Demonstrations***

Special tests or demonstrations. For certain Inspections—those which aim to assess whether systems or procedures are operating as intended—an especially powerful method can be used to gather information. In these Inspections, staff can test the systems or procedures directly and obtain new, directly relevant information themselves. Perhaps the best illustration of this method comes from the Inspection of the Runaway Youth Hotline. The purpose of this Inspection was to determine how well the federally funded toll-free hotline number operated in putting a runaway in touch with his or her parents or guardian. In other words, did the hotline operate as intended whenever a runaway dialed the number?

Inspections staff could have extracted computerized data from the program's MIS (if one existed); they could have reviewed written reports submitted by local hotline projects; or they could have discussed the issues with hotline officials, telephone operators, and runaways themselves. Each of these methods would have provided useful information about the hotline's operations.

However, the Inspections staff decided instead to test the hotline themselves. Posing as runaways, Inspections staff around the country telephoned the hotline at designated times and with designated requests. For each of a large number of calls, Inspections staff carefully recorded exactly what occurred during their call.

The results were shocking: it took an average of 17 calls simply to reach the hotline operator. For the first 16 calls, the Inspections runaways received either a busy signal or no answer. Faced with these findings, both HHS program officials and the Secretary took immediate action. Important changes were soon made in the program, and a “runaway’s” experience in using the hotline improved considerably.

One reason major changes occurred so quickly in the runaway youth hotline is because of the undeniable persuasiveness of actual tests. This persuasiveness is the main advantage of tests and demonstrations. The appeal of recent, first-hand experience is quite convincing to most audiences, usually more convincing than personal testimony or even abstract performance data.

There is no really potential disadvantage to tests or demonstrations except that it is not applicable to every Inspection. This method can be used only when there are both (1) a system or set of procedures which is designed to operate in certain ways, and (2) standards for “successful performance” which either exist in advance or can be agreed upon afterwards. However, these situations may exist more often—and there may be more opportunities for tests or demonstrations—than we generally realize. (See References for Further Reading at the end of this Guide.)

### ***Structured Case Studies***

Structured case studies. Even though this method is in some sense a combination of several other methods, it is sufficiently different that it deserves special mention. A case study involves a more in-depth examination into one or a few specific situations. This differs considerably from other methods which aim to examine a number of situations and produce an aggregate set of findings. In a case study, the specific instance is critical and is analyzed and reported on separately; in most other methods, specific instances are aggregated into the whole picture and become unidentifiable.

Case studies can be categorized into many different types, but two important types for Inspections are the ***illustrative*** case study and the ***critical incident*** case study. In an illustrative case study, typical situations are highlighted in considerable detail in order to illustrate more specifically the general findings from the study. For example, the Inspection of Computer Fraud Perpetrators included several illustrative case studies of typical perpetrators and how they accomplished their objectives. These case studies illustrated the Inspection’s more general findings about weaknesses in Federal computer systems.

In contrast, critical incident case studies also highlight specific examples, but these examples are deliberately chosen because they are atypical, not typical, of most other examples. A vulnerability study, for example, might

detail the most shocking example of abuse of a particular HHS program in order to document the glaring risk and to uncover the most blatant vulnerabilities. This type of case study is not meant to be representative of what *generally* occurs, but to show what *has* occurred and what *could* occur again.

Case studies generally involve a variety of other methods, including any of those previously discussed. Their main advantage is the greater depth of understanding which comes from focusing more in-depth on one or a few specific situations. Also, findings tend to have a greater emotional impact when they involve specific names and events than when they are aggregated into statistics.

The main disadvantages of case studies are the risk of biasing findings by the choice of cases to study and the personal commitment required to understand fully a specific case. To gather the rich detail needed for a case study, Inspections staff thoroughly immerse themselves in all information about the case. Naturally, this takes considerable time and effort, not to mention emotional energy. (See References for Further Reading at the end of this Guide.)

With such a large methodological toolbox to choose from, it would be ideal if each method were equally useful for gathering information from each type of source. Were this the case, Inspections staff could then select whichever method is most convenient at the time and use it to gather all the needed information from all sources. However, gathering information is not this simple, and certain methods are better suited for tapping only certain types of sources. As a result, methods must be selected very carefully.

Figure 2 shows which methods are most appropriate for different types of sources. For example, computerized extraction of data can tap into existing data bases and reporting systems, but it cannot be used to gather information from individual-level records or files, persons, documents, or direct experience. A different method—observations—can gather information from persons and direct experience, but it cannot be used to tap into other types of sources.

Figure 2 is interesting for two reasons. First, looking across each row, we see that several methods (computerized extraction of data, document reviews, observations, case studies) can tap into more than one type of source, while other methods (record reviews, personal discussions, mailed surveys, unobtrusive measures, tests, or demonstrations) can tap into only one type of source. In this sense, methods, which can tap into more than one type of source, are more flexible than other methods.

Second, looking down each column, we see that most types of sources can be tapped by more than one method. For example, Inspection staff attempting to directly experience a procedure could visually *observe* the procedure in action, *develop unobtrusive measures* of its performance, or *test* it directly. Each method provides slightly different information about the procedure, and each could be used by itself. However, using all three methods is more comprehensive than using one method alone, and the combination is more convincing to audiences. In other words, triangulating with different methods is as useful and as persuasive as triangulating with different types of sources.

**Figure 2**  
**Different Methods Available to Tap**  
**Different Types of Information Sources**

Types of Information Sources

<i>Methods for Gathering Information</i>	<i>Existing Data Bases</i>	<i>Reporting Systems</i>	<i>Individual level Records or Files</i>	<i>Persons or Offices</i>	<i>Documents</i>	<i>Direct Experience</i>
<b>Computerized Extraction of Data</b>	<b>X</b>	<b>X</b>				
<b>Document Reviews</b>		<b>X</b>			<b>X</b>	
<b>Record Reviews</b>			<b>X</b>			
<b>Personal Discussions</b>				<b>X</b>		
<b>Mailed Surveys</b>				<b>X</b>		
<b>Observations</b>				<b>X</b>		<b>X</b>
<b>Unobtrusive Measures</b>						<b>X</b>
<b>Tests or Demonstrations</b>						<b>X</b>
<b>Case Studies</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>

## Determining the Analysis Plans

The final step before designing the Inspection is to determine how Inspections staff will analyze each item of the information which will be gathered. This plan should be as specific as possible. For example, which items of information will be compared to check for the accuracy of information or to determine the consistency of responses? For which items will frequencies, means, or other descriptive statistics be computed? For which items will cross tabulations, correlations, or other measures of association be calculated?

While it may seem strange to plan analyses before the necessary information is even gathered, this is exactly the proper time. Otherwise the Inspections staff may find themselves gathering information which is never used or, worse yet, not gathering information which is later needed for critical analyses. This important topic is the subject of another Guide in this series—OEI Technical Assistance Guide #5: Analyzing the Information Gathered.

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