Social Networks Testing

A Community-Based Strategy for Identifying Persons with Undiagnosed HIV Infection

Monitoring and Evaluation Guide

CDC Social Networks Team

TABLE OF CONTENTS

OVERVIEW 3
SECTION ONE: PROGRAM MONITORING 5
Part 1: Monitoring program implementation and management 5
Part 2: Monitoring processes 6
Part 3: Monitoring program performance 20
Part 4: Monitoring achievement of goals and objectives 22
Program goals 22
Process objectives 22
Outcome objectives 23
Part 5: Vignettes 24
SECTION TWO: PROGRAM EVALUATION 25

OVERVIEW

Background

Available evidence suggests that the majority of new HIV infections in the United States originate from HIV-infected persons who are not yet aware of their infection. Therefore, it is a national priority to help HIV-infected persons learn that they are infected and link them to medical, prevention, and other services. CDC currently funds health departments and community-based organizations (CBOs) to conduct HIV counseling, testing, and referral (CTR) in a variety of settings. The prevalence of positive tests in these sites is highly variable, but is often very low, suggesting a need for more efficient CTR strategies that will reach persons not currently being reached with other strategies.

One strategy for reaching and providing HIV CTR to persons with undiagnosed HIV infection is the social networks testing strategy. This strategy is based on the notion that individuals are linked together to form large social networks, which often serve as a route to spread infectious diseases- but which can also serve as a route for delivering disease prevention services. Enlisting HIV-positive or high-risk HIV-negative members of social networks to encourage *their* network associates to be tested for HIV can provide an efficient and effective route for accessing individuals who are infected with HIV (or who are at high risk for infection). These individuals can then be linked to appropriate medical and prevention services.

Proper monitoring and evaluation of a social networks testing program is important for ensuring the specified program objectives are met and, also, that the program is implemented as planned.

Definitions

"Monitoring" refers to the simple description, counting, and tracking of processes or events, without in-depth analysis or comparisons. Monitoring is important for assessing if something is being done, if it is being done as intended, if it is being done where and when intended, and if it is being done as much as intended. In particular, monitoring is useful for assessing adherence to and changes in policies, procedures, and protocols and progress toward achieving objectives.

"Evaluation" refers to in-depth analysis and comparisons that answer questions such as "Is it effective?" or "Why is it effective?" Evaluation is important when determining how to make a program work better.

Descriptions and benefits of program monitoring and evaluation

A monitoring and evaluation plan should be based on a detailed implementation plan and a flow diagram. The implementation plan includes all procedures and protocols required for program implementation. The flow diagram is an illustration of each phase of the program, including the sequence in which program activities should occur. It may also be desirable to create a logic model that includes program activities, program outputs, short-term outcomes, intermediate-term outcomes, and long-term impacts. Each of these resources are used to identify

questions that should be addressed through monitoring and evaluation. These questions, in turn, identify different types of data, specific data elements, and potential sources of data that are needed for effective monitoring and evaluation. This information can also be used to develop data collection instruments.

The primary purposes for monitoring and evaluating a social networks testing program are to:

- Monitor project processes and performance in an ongoing manner
- Allow program managers to continuously improve processes and performance and, thus, ensure objectives are being met
- Ensure that the program is implemented within the desired time frame
- Determine whether the project goals have been achieved (at the end of the program)

Purpose of this document

This document describes the procedures that should be used to monitor and evaluate a social networks testing program. This document should be used as a basis for creating site-specific monitoring and evaluation plans.

SECTION ONE: PROGRAM MONITORING

A social networks testing program should be monitored in an ongoing manner and information obtained through monitoring should be used to improve program performance. The following five domains should be monitored:

- Program implementation and management
- Program processes
- Program performance
- Achievement of goals and objectives
- Resource requirements (for example, staffing requirements and cost)

Monitoring tools that can be tailored for use in your program are located in your *Social Networks Testing Monitoring and Evaluation Plan Template*.

Part 1: Monitoring program implementation and management

The first domain addressed by the plan is *monitoring of program implementation and* management. Implementation and management activities include administrative tasks such as hiring staff, purchasing equipment, and developing policies and procedures. It is necessary to monitor these types of activities with a timeline to ensure critical operational issues are being addressed and that program implementation is on schedule. Timelines allow managers to ensure their program is being implemented as intended and, if not, why not.

Timelines should include projected start and completion dates for each task, as well as actual start and completion dates. Timelines should also include qualitative data stating successes experienced, barriers encountered, and solutions to address any barriers for each task. The program timeline should be created in your *Social Networks Testing Monitoring and Evaluation Plan Template*.

Some example timeline items are:

Task (Example)	Start Date (Example)	Completion Date (Example)	Successes, Barriers, Solutions (Example)
1. Complete staff social networks training	*Projected:* 3/15/2007	*Projected:* 3/18/2007	Staff were not able to register in for March training because of schedule conflicts
	Actual: 4/18/2007	*Actual:* 4/21/2007	
2. Obtain feedback from advisory board regarding promotional materials	*Projected:* 4/1/2007	*Projected:* 4/14/2007	Staff met with advisory board on two different occasions to get input on new program brochure
	Actual: 4/1/2007	*Actual:* 4/14/2007	
3. Obtain all memoranda of agreement from collaborators	*Projected:* 4/1/2007	*Projected:* 4/30/2007	Almost all collaborators submitted MOAs on time (except for Triad Health Center)
	Actual: 4/1/2007	*Actual:* 5/6/2007	

Part 2: Monitoring processes

The second domain addressed by the plan is *monitoring of key program processes*. The social networks program includes four phases:

- Recruiter Enlistment
- Engagement (Orientation, Interview, and Coaching)
- Recruitment of Network Associates
- Counseling, Testing, and Referral (CTR)

Each phase consists of a sequence of steps or processes. For example, key processes in the Recruiter Enlistment phase are to identify potential recruiters, screen potential recruiters for eligibility, and contact potential recruiters to invite them to participate. Your agency's implementation plan and flow diagram should identify the key processes in your program and describe how your agency initially plans to accomplish each process. (See Figures 1 and 2 in this section for an example high-level flow diagram and an example detailed flow diagram.)

Process monitoring should involve a periodic review of program processes, such that successes and barriers encountered during program implementation may be identified. By conducting regular monitoring of program processes, your agency will be able to make continuous improvements to the social networks testing program where needed. Processes should be monitored by reviewing qualitative data collected via: input from advisory groups in the target population, notes of outreach and project coordinator staff, meeting minutes, weekly activity reports, and/or interviews with staff. Successes experienced, barriers encountered, and solutions to address any barriers associated with each process should be documented. Program processes and any qualitative data collected relevant to each process should be documented in the *Social Networks Testing Monitoring and Evaluation Plan Template.*

Key processes for each phase are listed below. Additional processes critical to your program may be added within each phase. Processes within a given phase may be reorganized as needed to better represent your program. All processes should be represented in the flow diagram.

Recruiter Enlistment Phase
1. Identify potential recruiters (both initially and on ongoing basis)
2. Screen potential recruiters for eligibility
3. Contact eligible recruiters and invite them to participate in project

Engagement Phase
1. Orient recruiters, explain recruitment strategy, provide PCRS information
2. Elicit information about network associates
3. Develop a plan for recruiting network associates and arrange follow-up with recruiters
4. Coach recruiters to recruit and refer network associates

Recruitment of Network Associates Phase
1. Recruiter contacts network associates and recommends counseling and testing
2. Recruiter escorts network associates to CTR site or provides CTR referral information
3. Verify that network associates reported for CTR and link network associates to specific recruiters

Counseling, Testing, and Referral Phase
General:
1. Assess participant risk, provide information, recommend testing, obtain informed consent
2. Provide HIV prevention counseling (before or after testing, for both rapid and standard tests)
For network associates receiving standard tests:
1. Collect and process specimen
2. Schedule follow-up to provide results
3. Provide and explain results
4. Attempt to re-contact associates who do not return for test results
5. For individuals testing positive: a. Conduct medical evaluation b. Provide HIV prevention counseling c. Refer for PCRS d. Assess need for other services and offer referrals
6. For individuals testing negative, characterize client as high-risk or low-risk
7. For individuals characterized as high-risk, negative: a. Provide HIV prevention counseling b. Assess need for other services and offer referrals c. Recommend and schedule follow-up testing
8. For individuals with indeterminate tests: a. Schedule follow-up b. Provide HIV prevention counseling
9. Follow up on referrals
For network associates receiving rapid tests:
1. Collect specimen and process specimen
2. Provide and explain test results
3. Attempt to re-contact associates who do not receive rapid test results
4. For individuals with preliminary positive rapid test results: a. Recommend confirmatory test b. Provide HIV prevention counseling c. For individuals declining confirmatory testing, assess need for other services and offer referrals
5. For individuals testing negative, characterize client as high-risk or low-risk
6. For individuals characterized as high-risk, HIV-negative: a. Provide HIV prevention counseling

Counseling, Testing, and Referral Phase
b. Assess need for other services and offer referrals c. Recommend and schedule follow-up testing
7. For individuals with invalid rapid tests, repeat rapid test (for first invalid test) or follow protocol for repeated invalid tests
8. Follow-up on referrals
For network associates receiving confirmatory tests (for preliminary positive rapid tests):
1. Collect and process specimen
2. Provide and explain test results
3. Attempt to re-contact associates who do not return for test results
4. For individuals testing positive: a. Provide HIV prevention counseling b. Refer for medical evaluation and care c. Refer for PCRS d. Assess need for other services and offer referrals
5. For individuals testing negative, characterize the client as high-risk or low-risk
6. For individuals characterized as high-risk HIV-negative: a. Provide HIV prevention counseling b. Assess need for other services and offer referrals c. Recommend and schedule follow-up testing
7. For individuals with indeterminate tests: a. Recommend and schedule follow-up b. Provide HIV prevention counseling
8. Follow up on referrals

The flow diagrams on the following pages consist of typical processes in a social networks testing program. Figure 1 depicts the high-level flow diagram for the testing strategy. Figures 2 through 11 depict details broken out by each phase of the program.

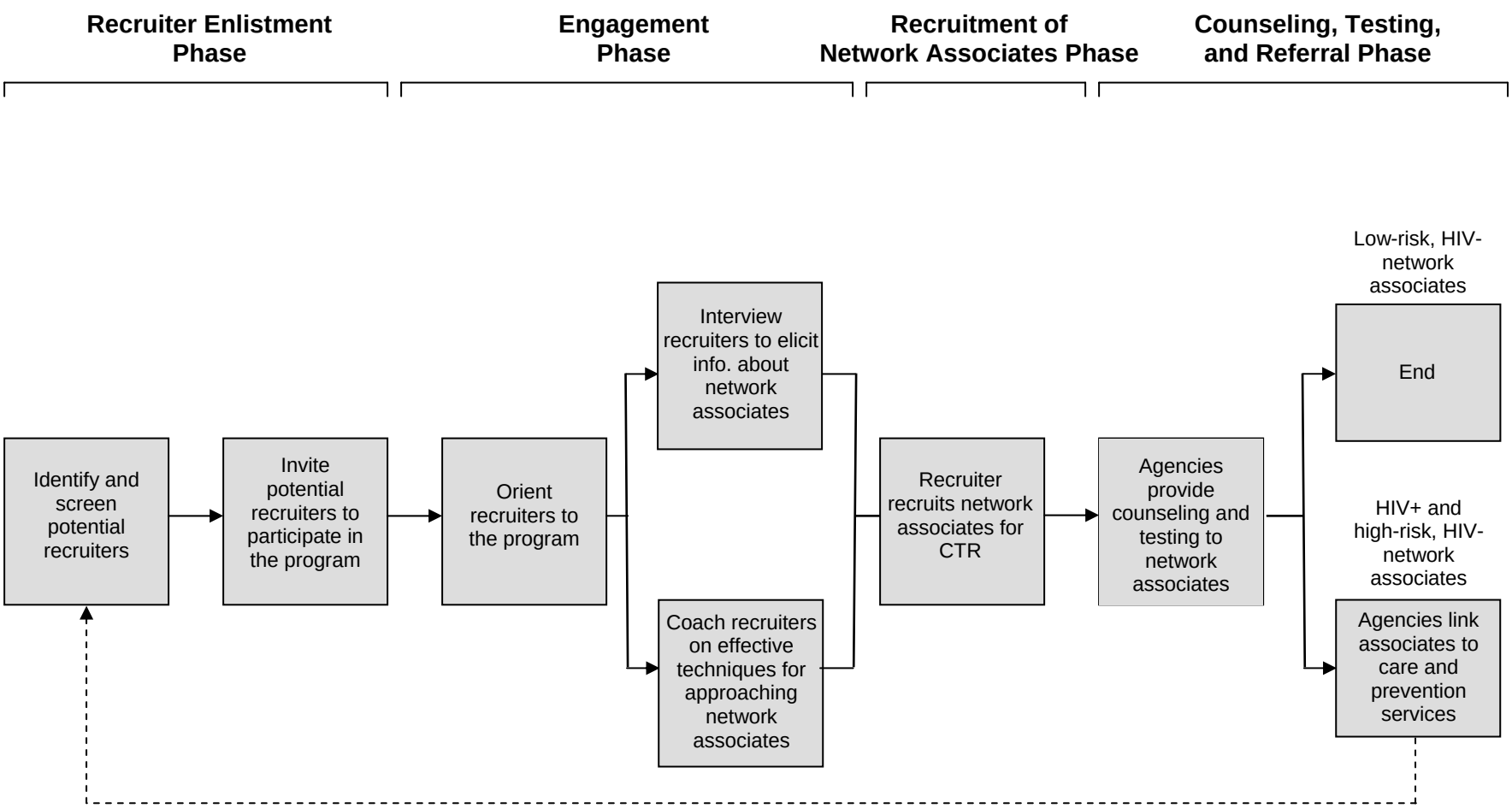

FIGURE 1-Flow diagram for the four phases of the Social Networks testing

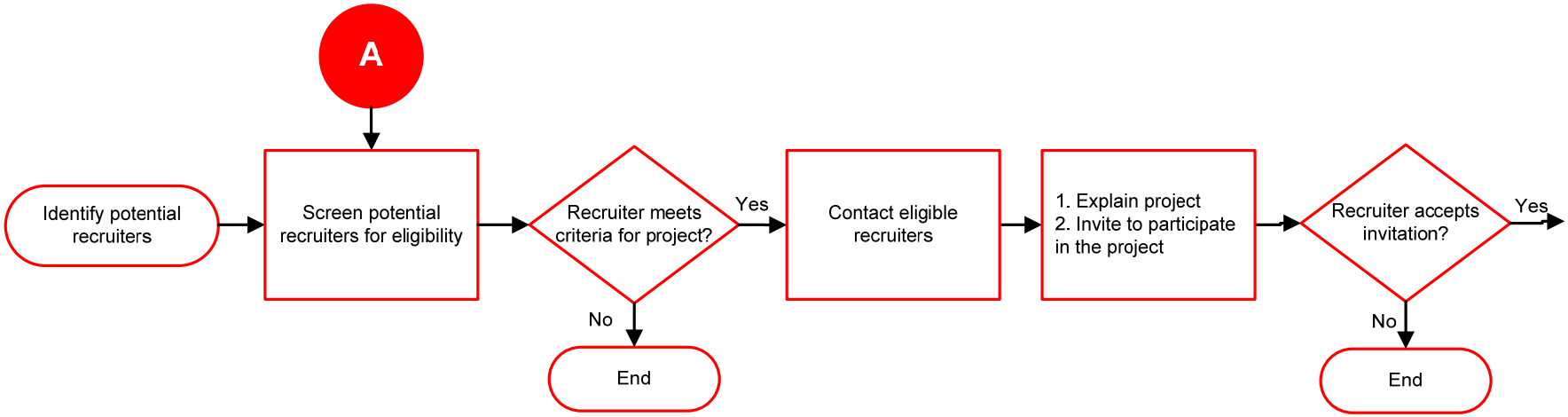

FIGURE 2-Recruiter Enlistment Phase

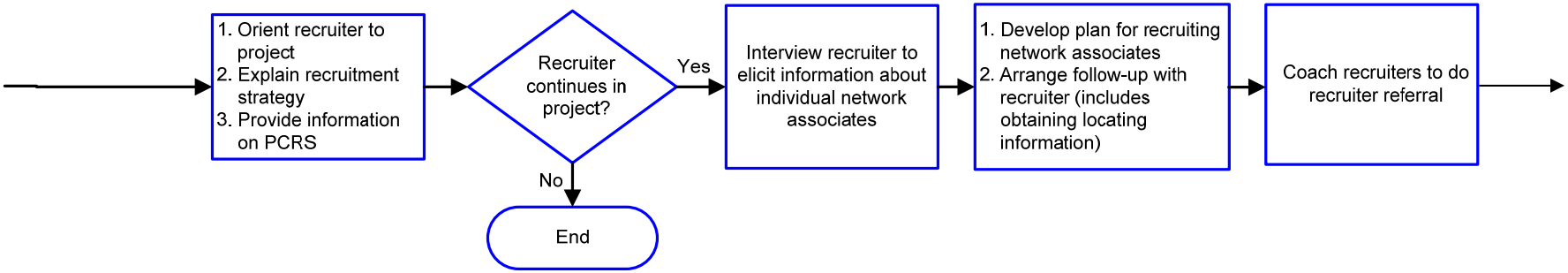

FIGURE 3-Engagement Phase (Orientation, Interview, Coaching)

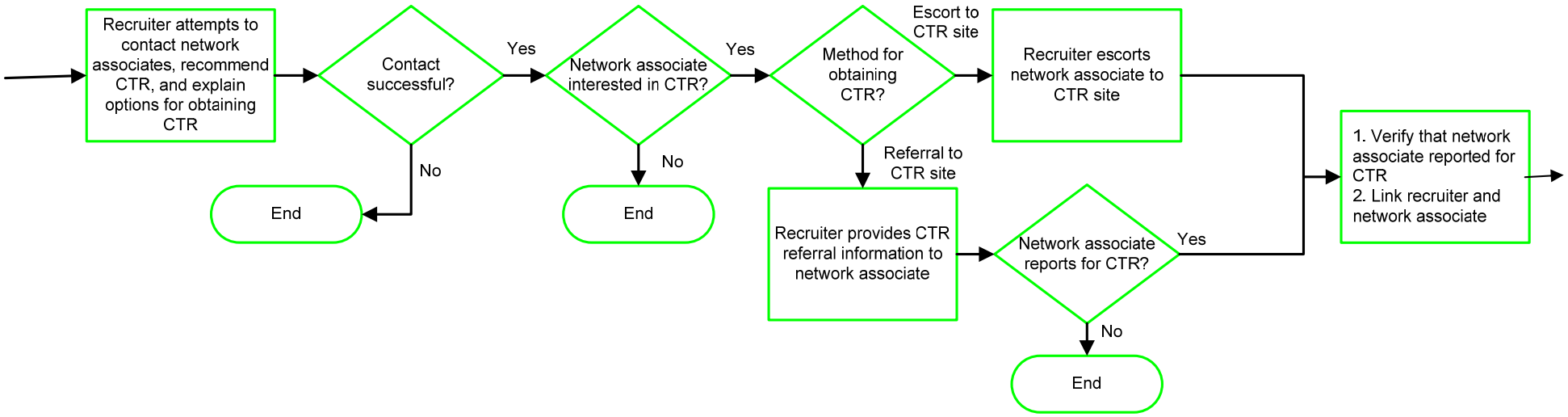

FIGURE 4-Recruitment of Network Associates Phase

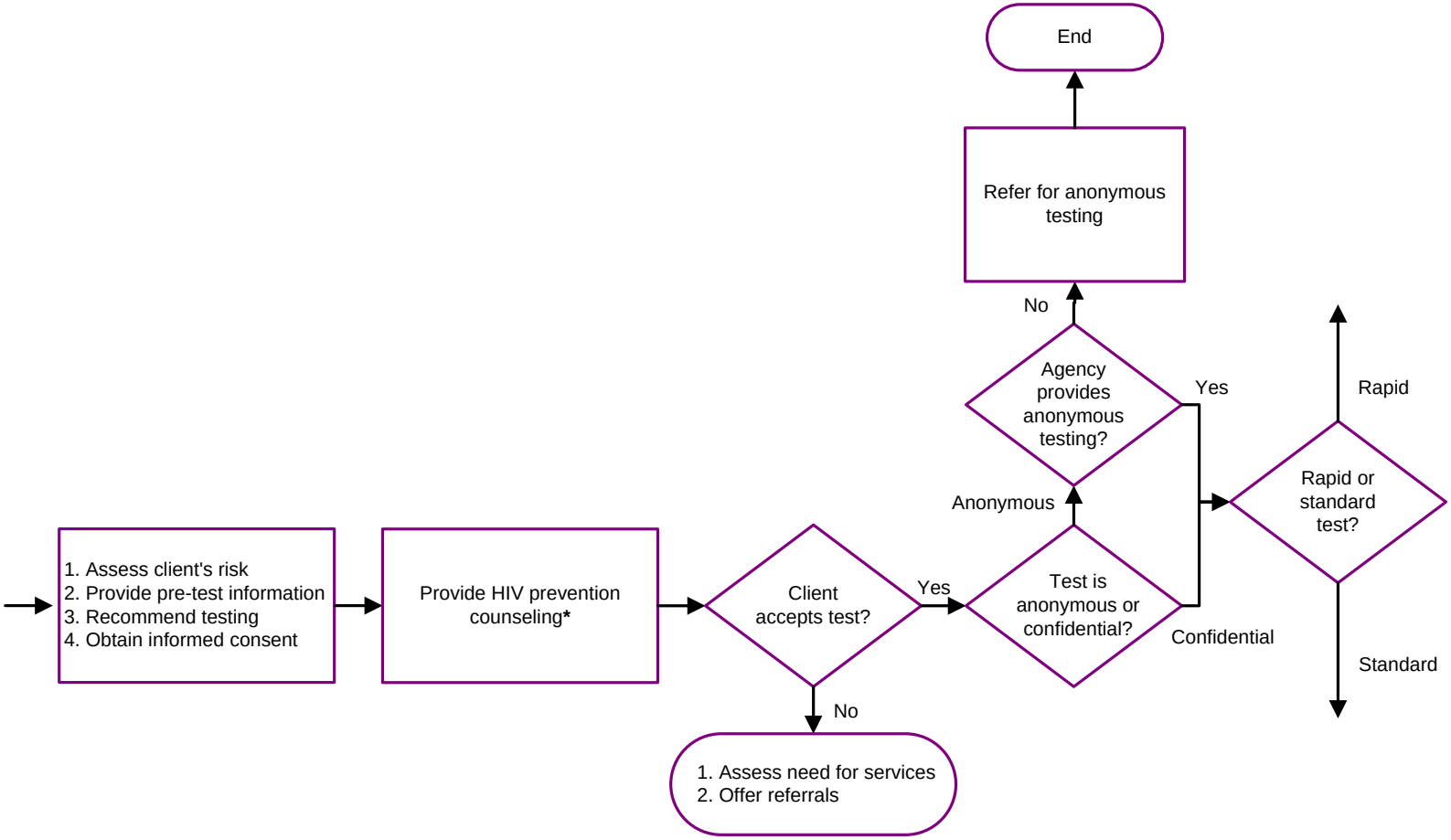

FIGURE 5-Counseling, Testing, and Referral Phase (General)

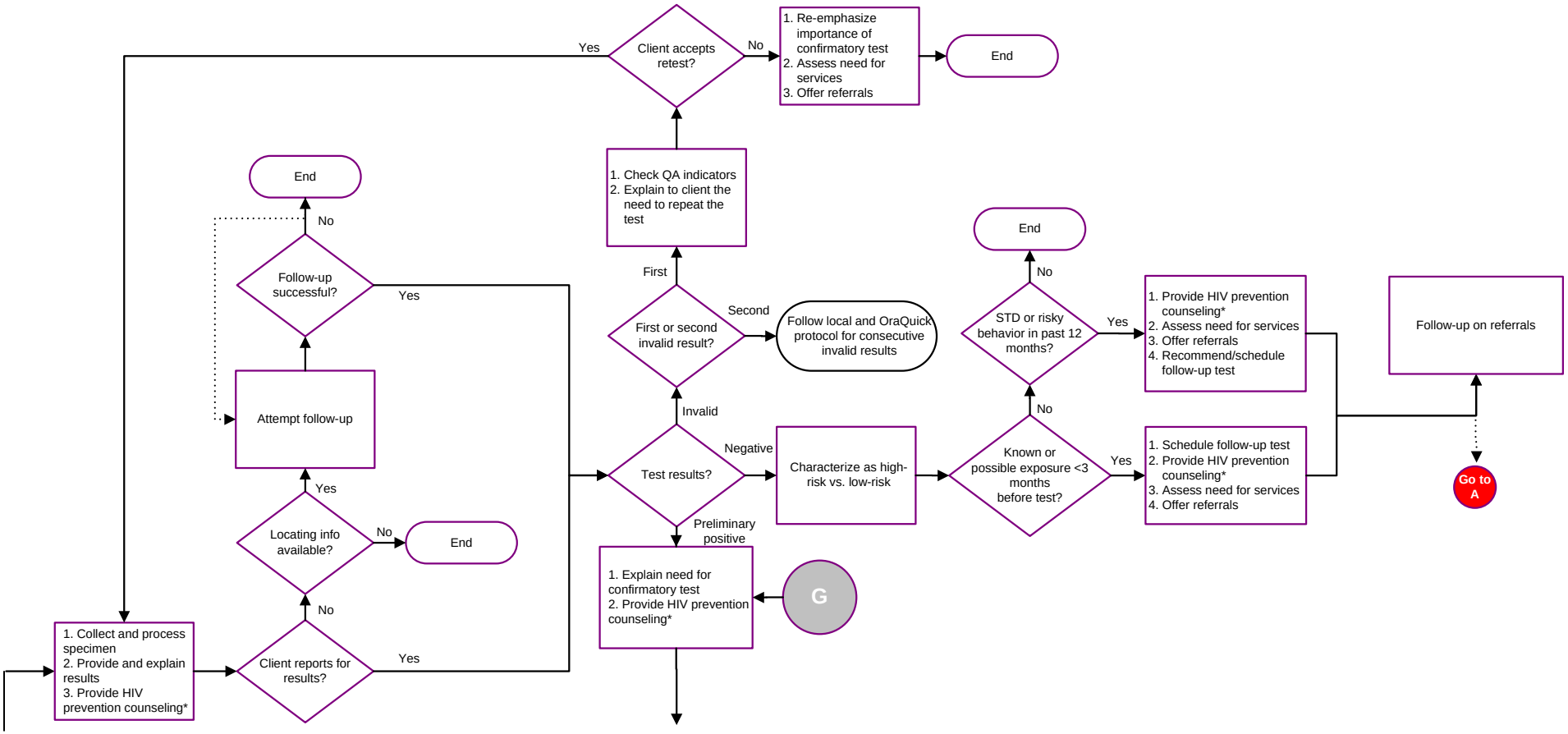

FIGURE 6-Counseling, Testing, and Referral Phase (Rapid Test- Excluding Confirmatory Test Referral)

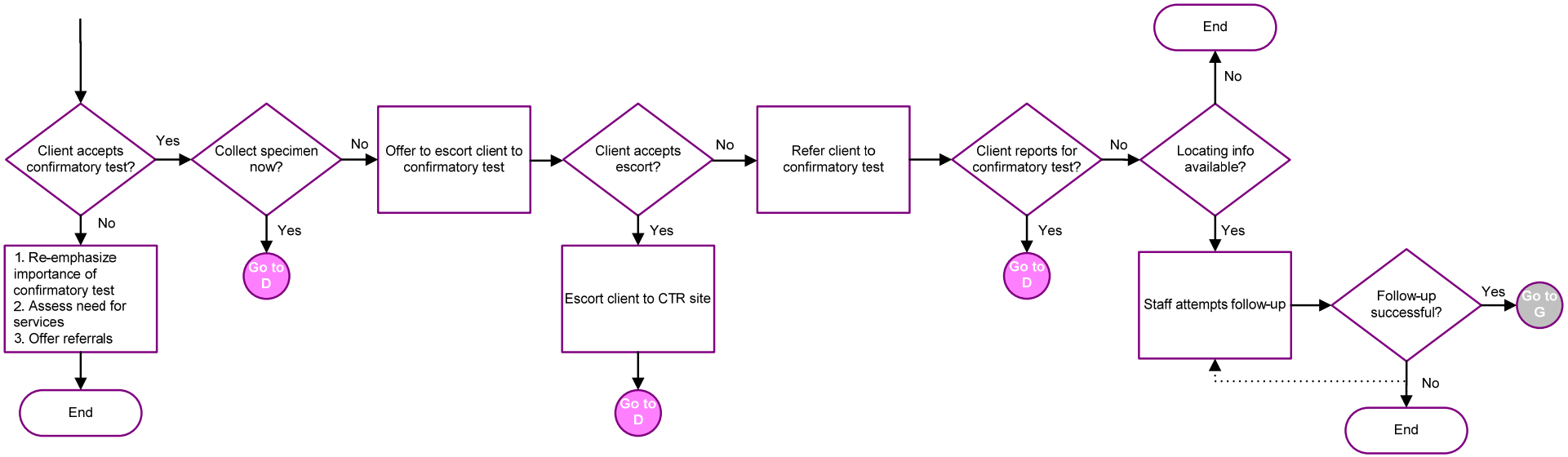

FIGURE 7-Counseling, Testing, and Referral Phase (Confirmatory Test Referral for Rapid Test)

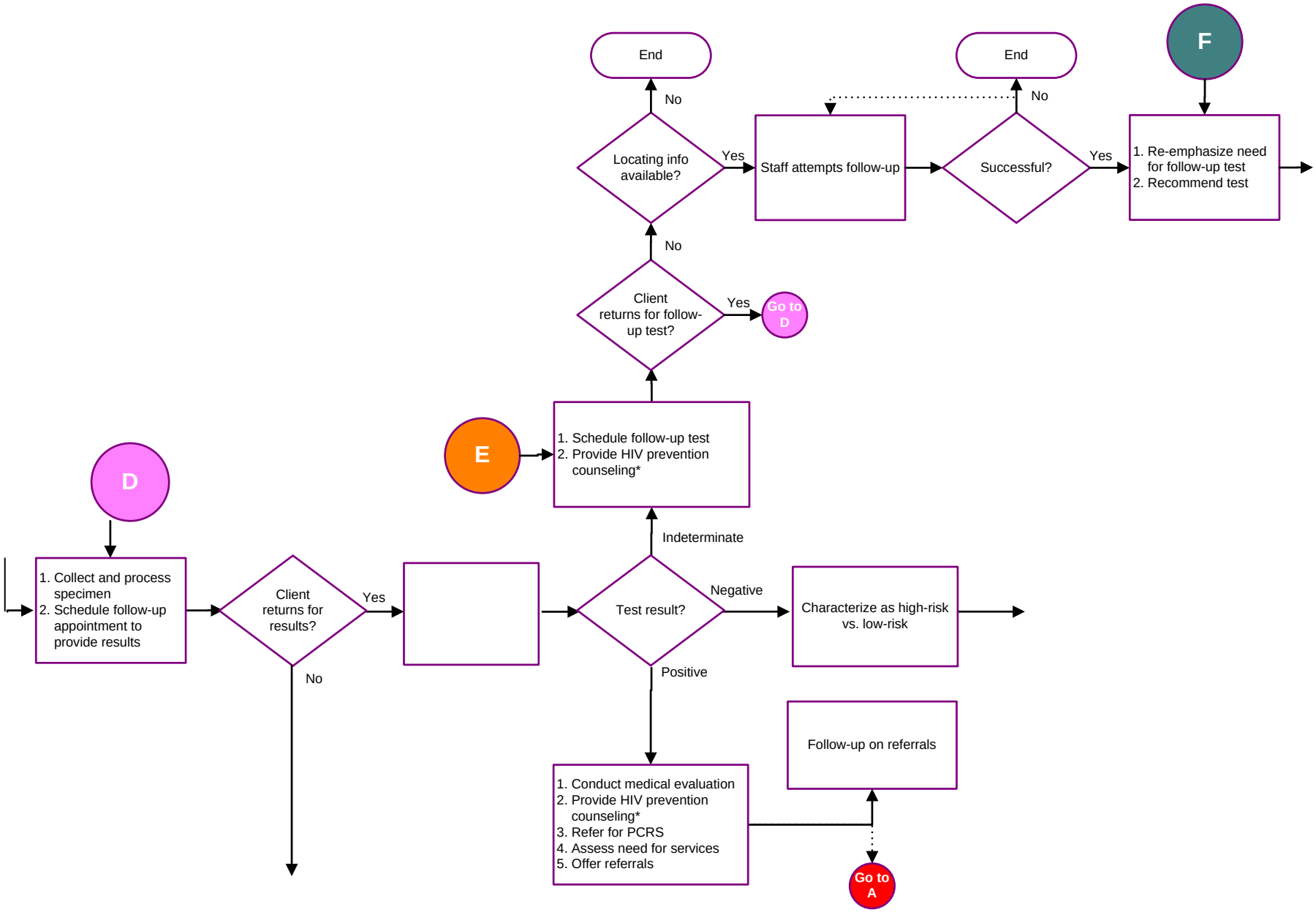

FIGURE 8-Counseling, Testing, and Referral Phase (Standard Test- Client Returns for Results)

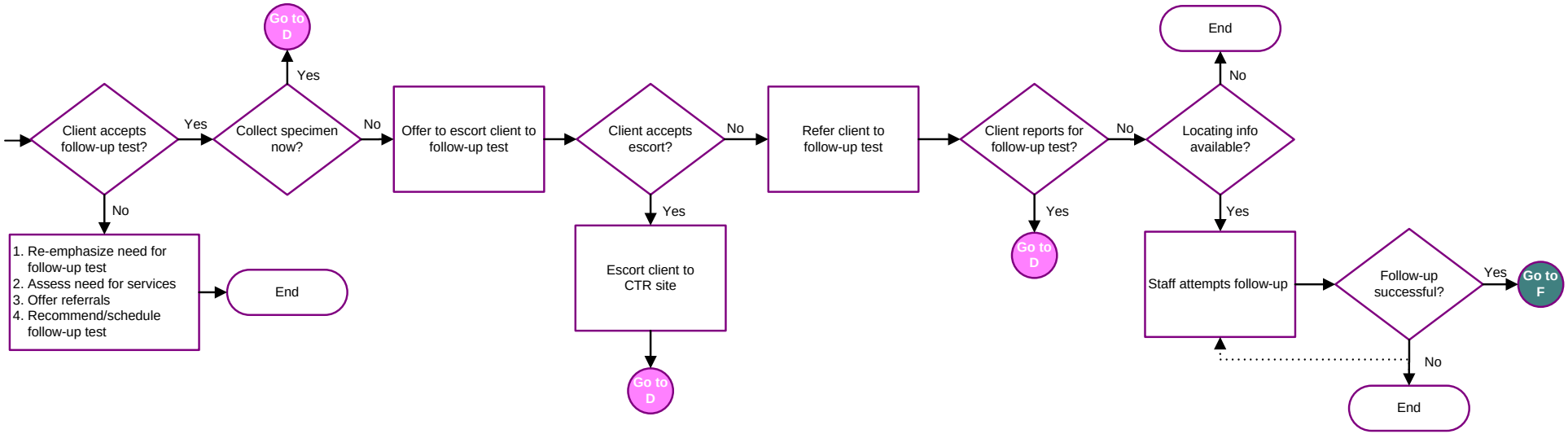

FIGURE 9-Counseling, Testing, and Referral Phase (Taking Follow-up Test for Standard Test)

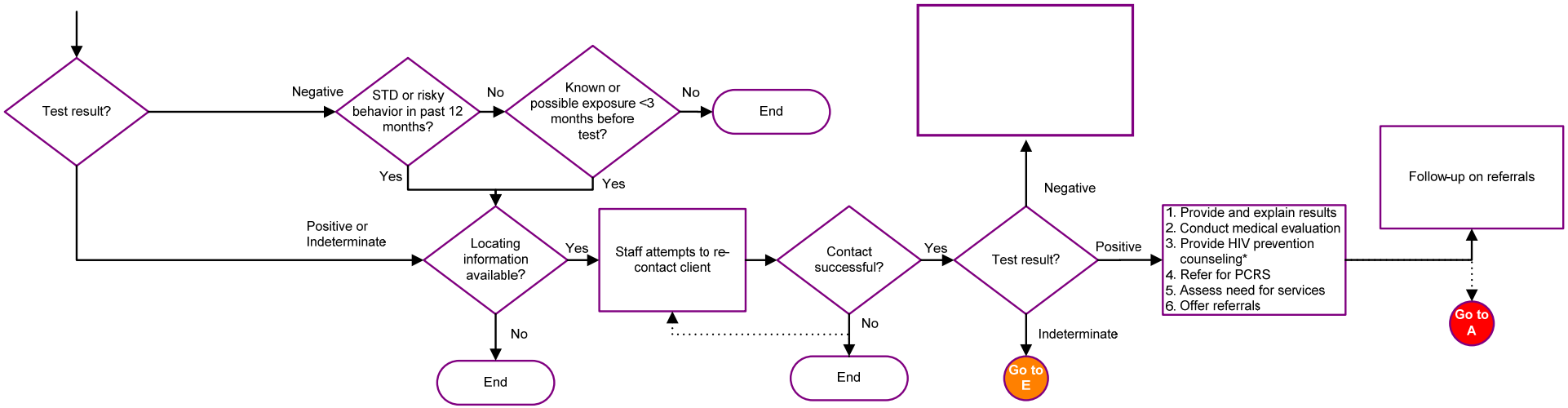

FIGURE 10-Counseling, Testing, and Referral Phase (Client Does Not Return for Standard Test Results)

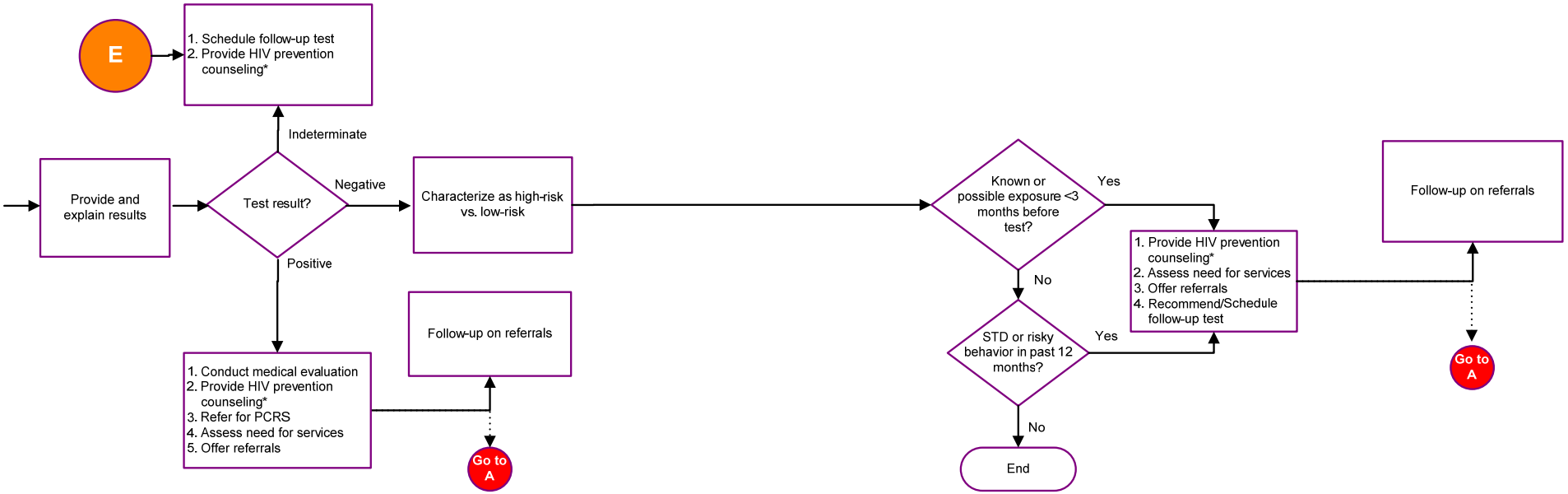

FIGURE 11-Counseling, Testing, and Referral Phase (Characterizing Client as High-risk or Low-risk for Standard Test)

Part 3: Monitoring program performance

The third domain addressed by the monitoring plan involves *monitoring of program performance*. This type of monitoring involves quantitative measurement of the performance of key steps or processes. Such monitoring will allow program managers to track, in an ongoing manner, whether the intended target populations are being reached with social networks testing, how many persons are being reached, characteristics of the persons being reached, and their outcomes. Monitoring performance measures will allow the key processes to be adjusted as needed to optimize the program.

Some performance monitoring data should be collected in logs and reported in aggregate format (for example, summary measures such as total number of people identified by a particular recruiter). However, most data on recruiters and network associates should be collected at the client level and entered into a database, if possible. Using a database allows program managers to generate summary reports about program participants (for example, how many people were tested last month, how many African American recruiters were enlisted in Year 1, percentage of network associates tested that were later enlisted as recruiters). Using a database is the most effective way to monitor program performance.

Performance data for each phase are listed below, along with sources from which the data can be obtained. These data sources are forms and logs designed for use in social networks testing programs and can be found in the XXX document. Additional performance measures and data sources specific to your program may be added.

Recruiter Enlistment	
Performance Measures:	**Data Source:**
1. Number of persons invited to serve as recruiters.	Recruiter Enlistment/ Orientation Log
2. Number of persons who agreed to serve as recruiters (i.e., accepted the invitation to participate in the project).	Recruiter Enlistment/ Orientation Log
3. Number of persons enlisted as recruiters who were previously network associates.	Recruiter Enlistment/ Orientation Log
4. Reasons given for why potential recruiters declined invitation (i.e., why they did not want to enlist).	Recruiter Enlistment/ Orientation Log

Engagement Phase	
Performance Measures:	**Data Source:**
1. Number of persons who continued as recruiters with the project after receiving orientation.	Recruiter Enlistment/ Orientation Log, Participant Data Form
2. Reasons why recruiters did not continue past orientation.	Recruiter Enlistment/ Orientation Log
3. Demographics (age group, gender, race and ethnicity), HIV	Participant Data Form

Engagement Phase	
Performance Measures:	**Data Source:**
risk category, and HIV status of recruiters who continued past orientation.	
4. Number of network associates identified by or elicited from recruiters. (This figure represents total number of network associates elicited from all recruiters combined, not necessarily the total number of unique individuals elicited.)	Participant Data Form
5. Number of network associates for whom full names were elicited from recruiters.	Participant Data Form
6. Number of network associates for whom only partial names were elicited.	Participant Data Form
7. Number of network associates elicited who were anonymous.	Participant Data Form

Recruitment of Network Associates Phase	
Performance Measures:	**Data Source:**
1. Number of network associates successfully contacted and offered HIV CTR.	Participant Data Form
2. Demographics (age group, gender, race and ethnicity), HIV risk category, and HIV status of network associates who are successfully recruited.	Participant Data Form

Counseling, Testing, and Referral Phase	
Performance Measures:	**Data Source:**
1. Number of network associates contacted who received HIV CTR.	Participant Data Form
2. Number of tested network associates who test positive.	Participant Data Form
3. Number of network associates testing positive who receive their test results.	Participant Data Form
4. Number of network associates testing positive who are successfully referred for medical evaluation and treatment.	Participant Data Form
5. Number of network associates testing positive who are successfully referred for PCRS.	Participant Data Form
6. Number of network associates testing positive who are successfully referred for HIV prevention services.	Participant Data Form
3. Number of tested network associates who test negative.	Participant Data Form
4. Number of network associates testing negative who are high-risk.	Participant Data Form
5. Number of network associates testing negative who receive their test results.	Participant Data Form
6. Number of network associates testing negative who are	Participant Data Form

Counseling, Testing, and Referral Phase	
Performance Measures:	**Data Source:**
successfully referred for HIV prevention services.	
7. Number of network associates whose tests are indeterminate.	Participant Data Form
8. Number of network associates testing indeterminate who receive their test results.	Participant Data Form
9. Demographics (age group, gender, race and ethnicity), HIV risk category, and HIV status of network associates who received HIV CTR.	Participant Data Form

Part 4: Monitoring achievement of goals and objectives

The fourth domain addressed by the monitoring plan is *monitoring the progress made toward achieving goals and objectives*. This type of monitoring will allow program managers to periodically determine if goals and objectives are being achieved. Goal and objective monitoring will also allow managers to modify their activities, or adjust their goals and objectives, as needed.

Program goals

Your agency's broad goals for the social networks testing program should already be identified in the implementation plan (in the Program Overview section- Section One). Example goals are:

Program Goals (Examples)
1. Assess feasibility of using social networks testing strategy to reach persons with, or at high risk for, HIV infection in Hispanic community.
2. Assess feasibility of using social networks testing strategy to link high-risk, HIV-negative Hispanic persons to prevention and other services.
3. Collect information on the cost and resource requirements of implementing this program (as compared to other testing programs).

By monitoring program implementation/management objectives, timeline, key processes, and program performance, you can determine whether the program goals are achieved.

Process objectives

Process objectives are measurable targets that are based on the key processes and performance measures identified in Parts 2 and 3. Process objectives should be realistic, quantifiable, and time-phased (that is, associated with a specific date by which the objective will be met), and they should be designed to measure ongoing progress toward achieving the program goals. Process

objectives, projected and actual target numbers for these objectives, and qualitative data collected relevant to each objective should be documented in the *Social Networks Testing Monitoring and Evaluation Plan Template*.

Example process objectives are provided below.

Recruiter Enlistment Phase (Example)
1. Screen 30 Hispanic potential recruiters each quarter.
2. Enlist 15 Hispanic HIV-positive recruiters each quarter.

Engagement Phase (Example)
1. Ensure 8 Hispanic recruiters in MSM risk group continue with program past orientation each quarter.
2. Interview 15 recruiters each quarter.

Recruitment Phase (Example)
1. Identify and successfully contact 100 network associates each quarter.
2. Successfully recruit 50 Hispanic network associates for testing each quarter.

Counseling, Testing, and Referral Phase (Example)
1. Provide test results to 80% of network associates tested in Quarter 1.
2. Provide test results to 90% of network associates tested in Quarter 2.

Outcome objectives

The primary outcomes for a social networks testing program should be:

- HIV-positive persons not previously aware of their infection will be identified and linked to medical, prevention, and other services
- HIV-negative persons at high risk for becoming infected with HIV will be identified and linked to prevention and other services

Outcome objectives are measurable targets that are specifically based on these general outcomes. Outcome objectives are relevant only to the CTR phase. Objectives related to other phases are,

by definition, process objectives. Outcome objectives, projected and actual target numbers for these objectives, and qualitative data collected relevant to each objective should be documented in the *Social Networks Testing Monitoring and Evaluation Plan Template.*

The outcome objectives for a social networks testing program should be:

Outcome Objectives
1. [Number] HIV-positive persons, previously not aware of their infection, will be identified by [Date]
2. [Number] or [Percentage] newly identified HIV-positive persons will be successfully linked to appropriate services by [Date]
3. [Number] high-risk HIV-negative persons will be identified by [Date]
4. [Number] or [Percentage] high-risk HIV-negative persons identified will be successfully linked to appropriate services by [Date]

Part 5: Vignettes

Often during implementation of new programs, situations arise that offer valuable insights into the actual experience of developing and implementing such a testing program. For example, a provider's experience with a particular recruiter or network associate may illustrate a particular success or problem that may exist with the program. Although your site-specific monitoring and evaluation plan will include the collection of substantial amounts of quantitative and qualitative data, it may not capture the special significance or richness of certain events. This kind of lesson may best be described in the form of a "story" or vignette.

Vignettes can be documented in the *Social Networks Testing Monitoring and Evaluation Plan Template*. Vignettes can serve as valuable learning tools for discussion at staff meetings.

SECTION TWO: PROGRAM EVALUATION

Program managers may want to conduct a program evaluation to assess the effectiveness of the Social Networks Testing program activities and to compare the relative effectiveness of different staff members and approaches. If significant differences are identified through program evaluation, further quantitative and qualitative investigation could be conducted to identify potential explanations for the differences. This information could then be applied toward improving program performance.

Examples of evaluation questions and comparisons that may be of value to your program are provided below. An evaluation plan specific to your program should be documented in the *Social Networks Testing Monitoring and Evaluation Plan Template.*

Program Evaluation
1. Overall yield (in terms of newly identified HIV-positive persons and high-risk negative persons identified) of the Social Networks Testing program compared to: a. other CTR activities conducted by your agency b. other CTR activities conducted by other agencies in the same jurisdiction c. PCRS in the same jurisdiction
2. Cost-effectiveness of Social Networks Testing strategy
3. Effectiveness of Social Networks Testing program in reaching and providing CTR to persons not being reached via other strategies
4. Effectiveness of Social Networks Testing program in reaching and providing CTR to the target population
5. Relative yield of interviewing by different interviewers in terms of number of network associates elicited
6. Relative yield of recruitment by different recruiters in terms of number of network associates located and tested
7. Relative yield of different recruiters in terms of number of newly identified HIV-positive and high-risk negative persons identified
8. Relative yield of HIV-positive recruiters and high-risk HIV-negative recruiters in terms of number of newly identified HIV-positive and high-risk negative persons identified
9. Relative proportions of HIV-positive and high-risk HIV-positive network associates successfully linked to medical services, PCRS, and HIV prevention services via the Social Networks Testing program compared with other CTR activities conducted by your agency
10. Relative effectiveness of Social Networks approach for different subpopulations or demographic groups