Reach Your Target Audiences:
Program Exposure and Gross Rating Points

The following text emphasizes the importance of having an adequate exposure or reach of your marketing messages to influence health behaviors. Explained below is Gross Rating Points (GRP) which is the marketing technique used to estimate, measure and evaluate exposure to your marketing messages. Much of the text comes from Phase 5: Evaluation. The transcript from a video in the phase is included. Gross Rating Points (GRP) is a commercial marketing tool rarely used by health promotion professionals. Health Promotion Operations will develop this tool for your use. Definitions follow the video transcript.

Determine Needed Exposure to Achieve Behavior Change Outcomes

Three successful social marketing programs (VERB, Wheeling Walks, National Highway Traffic Safety Administration) had goals to have target audience members exposed to marketing messages about six to nine times per week from at least two or three forms of media (channels). This should also be at least 115 GRPs per week. *A program goal should be to have enough exposure to have between 75% and 90% of the target audience be able to recall the messages if asked a year after the social marketing campaign begins.*

With over 90% recall hearing about the campaign after one year Wheeling Walks had an outcome of a 23% increase in the number of walkers. With a 74% recall of VERB campaign messages VERB had 25% more engagement in free-time physical activity. The NHTSA "Click It or Ticket" program consists of high visibility enforcement with an intense flurry of paid advertising and publicity about enforcement creates the heightened awareness and actual behavioral change we need to save lives. Seat belt use increased from 71% in 2000 to 82% in 2005.

Step 5.2: Select the key evaluation questions.

What To Do

Evaluation is the effort to find out what effect your program is having – whether it is reaching its objectives. Outcome evaluation studies are usually limited to specific periods in the life of a program. These studies try to link program activities to:

- **short-term outcomes**, such as who was **aware of a program** during its evaluation period
- mid-term outcomes, such as which determinants of behavior were changed
- long-term outcomes, such as the intended (and unintended) effects a program had on behavior and health problems

How to Do It

Derive evaluation questions from My Model

In *My Model*, you:

- described a sequence of steps in a behavior change process
- explained how the program is supposed to work, linking program activities to the target audience outcomes you hope to achieve
- **quantified program delivery/reach and outcome objectives**

Convert these logic model elements into evaluation questions

A basic evaluation question is

- **were *exposure levels* adequate to make a measurable difference?**

Adapt the question to your program content.

For example, if your program were designed to increase use of a [health behavior] among a target audience, you might ask whether:

- your ads reached enough of the target audience to detect an effect of the expected size at the level of statistical power afforded by your sample size

The extent of program exposure or "noise" is a particularly important evaluation consideration in Social Marketing.

View Video Segment:

Robert Hornik
"Program Evaluation and Noise" (7 Minutes)

Robert Hornik on "Program Evaluation and Noise" (Transcript)

The basic argument is that many communication programs -- many social marketing programs, particularly communication programs -- have focused on providing knowledge, providing ideas on the assumption that that's all it took to get people to change. They'd learn something new, "Ah! That's a good idea. I'll do it." And, of course, that rarely works. People are really rarely in that situation. So you can contrast two models of effect. One is a model which says, "I tell them. They learn it. They do it." The other is to say, "Behaviors are well-ensconced. They've got lots of supports, lots of reasons why people do them. And if you want to get behavior changed, it's going to take a long time."

At a simple level, it's just the amount of exposure that a program achieves. There is the number of times the message is heard and through the number through lots of channels. So it's making lots of noise means getting repeated exposure to your messages.

The program noise says, "It's an important issue. You really ought to pay attention to this." You hear it lots of times from lots of sources, and maybe at some point you begin to think it's true; and that's really the argument for program noise is when you have a situation where new knowledge isn't enough. But you really need to change social norms. You really need to change the way people think about it and get people to pay more attention to an issue, then that's the point at which repeated exposure may really matter. There's another argument for exposure, though, as well, which is our audiences are constantly changing. Think about the problem with immunization. People need to know about kids immunization when their kids are of the age to immunize. But every six months there are a whole bunch of new kids that are born. If you do it just once, you're not likely to reach those audiences that begin to come of age.

One of the things that multiple exposures may do is engender more social discussion. That is, you hear it. I don't, but because you hear it repeatedly you say, "This must be an important issue. I'll make it a topic of my social discussion." I'll talk about smoking or I'll talk about AIDS. Maybe if you heard it

only rarely, you might not want to talk about it probably; it doesn't become okay. I think that's real important for HIV, and that is it became acceptable to talk about condoms in public, which in an earlier period it simply wasn't. So the fact of repetition legitimates talking about something, which probably wouldn't come from single exposures even the people that were convinced about the truth of it.

I think the issue is that most programs fail when they fail, not because their messages are bad or they didn't understand their environment so well; it's that they never got enough exposure to matter. That is, they said, “Oh, we'll get this on the air because they'll give us contributed time.” And nobody ever sees the message. In my experience, it's probably the best single predictor of whether a program's successful or not. That is, how much exposure it got. And, in fact, I looked at a full range of programs and I think many of the well-known programs that have not been so successful have largely been not successful because they just didn't get enough exposure to matter. Given the background noise that was already there, they didn't add anything new. So one argument for measuring exposure is that it's the area of failure most often; and so really knowing whether or not you're actually getting to the audience, whether they recognize your message, whether they remember it or not seems to be an absolute minimum condition for deciding if a program's going to work. And lots of times it doesn't for just that reason.

there are whole classes of evaluation methods which are helped by being able to show that those were exposed. In fact, in those that were not exposed, we're showing the outcome that you wanted. That is, they're more likely to breast feed because we are going after it. They're more likely to do physical activity, if that's what you're going after, than people who were not so exposed. And although there are some problems with trying to evaluate things with simple associations between exposure and outcome, so there are good statistical methods we are trying to control for possible other characteristics that might have mattered. So being able to show not only how much exposure you've got -- which is a minimum condition for a successful program -- but also trying to show that exposure is associated both with intermediate outcomes -- mediating things like changes of knowledge, but also associated with behavior change in the end -- is a real important thing. So I think exposure is a crucial thing to measure and to do seriously.

In terms of how to measure exposure, there's a whole range of good methods. I think there are some methods which you can use which are independent of the individual's reports; that is, gross rating points for example or other sorts of external measures of how much exposure was achieved. But then there are lots of ways of measuring it directly with people. The most common ways certainly are asking people if they recall specific messages, again trying to make sure that they are not just making it up, that they're not claiming exposure when they really didn't get it. A typical way is to ask about false messages as well as true messages and answer correct for the fact that somebody will remember false messages.

If you were operating under the model which says, “This is behavior that's well-ensconced. This is behavior that people have been doing for a while; it's not going to be so easy to change,” you have to have quite reasonable expectations about how fast it's going to change relative to the amount of exposure you're providing. And so some people, well, you not going to get direct trade-off with every additional ad, you’re going to get that much more change; still there’s an argument which says, “For behaviors that are hard to change, that people hold dear, it's going to take a long time.” So I guess the real important issue in terms of evaluation when you think about a program noise model, what you're really saying is you're assuming that this is going to be a hard behavior to change. You're going to have to do lots of things and go through lots of channels, which means you'll need to have a reasonable expectation for how long it's going to take to get all those channels working, to get institutions to change, to get social networks to operate to try to say, “This is a new behavior.” That's not going to happen instantly and, therefore, probably the most important thing is to have patience. I realize often funders don't have patience. That is, they have very quick expectations: but typically with a program that has this model underpinning it, you have to expect slow change. Think about the smoking interventions. It's true that there's some decent evidence over a couple of years for Florida

or for the national campaign suggesting we've had effects; but in some level you go back to the extraordinary decline in smoking behavior that's present in the United States, and it happened at the rate of 2 percent a year. Many evaluations wouldn't even be able to detect that change without extremely large samples. But, yet, that was really a social movement change; it took a long time to take place. You had lots of aspects that were changing, but eventually it did produce very substantive change. You have to be ready to wait.

Formative Research
Process Evaluation
Outcome Evaluation
Resources & Reports

Gross Rating Points

Reach, frequency, and their product—gross rating points (GRP)—are all means of estimating exposure of an audience to advertising. Reach is defined as the proportion of the target audience that has an opportunity to be exposed to the ad, based on knowledge of the media consumption patterns of the target population and the advertising purchased. Frequency is the number of times an average target audience member is estimated to have an opportunity to view the advertisement in a given time period, usually weekly or monthly. Multiplying reach times frequency produces the measure GRP, the customary unit used by the advertising industry to measure estimated exposure to advertising. Although estimates of audience reach are used to make decisions about which programs or channels to include in a media buy plan, most ad agencies use estimates of GRPs to build an effective and efficient media buy plan.

Media monitoring companies make parallel projections of audience size (based on census data and other sources) for all media, and GRP estimates are calculated accordingly. GRPs are estimates of averages. For example, a reach of 80% means that 80% of a target audience composed of average individuals is believed to have had the opportunity to view the advertising; it is not an estimate of whether any particular individual did or did not see the advertising. Because GRPs are the product of reach and frequency estimates, a GRP estimate reflects many different possible exposure patterns. For example, if 10% of a population could be reached five times in a week, the weekly GRPs for that advertisement would be 50 (10 x 5); if 50% of the population could be reached once in a week the GRPs would also be 50 (50 x 1).

GRPs are calculated for each advertisement in each medium, and the GRPs for all exposure opportunities are summed. In some cases, estimation procedures are used to eliminate duplication of reach estimates, for example, if it is expected that one segment of a population will be reached by multiple television channels with the same advertisement.

GRP and Other Marketing Terms Definitions and Resources

Gross rating points is a measure of estimated exposure to advertising. Reach is defined as the proportion of the target audience that has an opportunity to be exposed to the ad. Frequency is the number of times an average target audience member is estimated to have an opportunity to view the advertisement in a given time period, usually weekly or monthly. Multiplying reach times frequency produces the GRP measure. Because GRPs are the product of reach and frequency estimates, a GRP estimate reflects many different possible exposure patterns. For example, if 10% of a population could be reached five times in a week, the weekly GRPs for that advertisement would be 50 (10 x 5); if 50% of the population could be reached once in a week, the GRPs would also be 50 (50 x 1).

Wong F, Huhman M, Heitzler C, Asbury L, Bretthauer-Mueller R, McCarthy S, et al. VERB™ — a social marketing campaign to increase physical activity among youth. Prev Chronic Dis [serial online] 2004 Jul [*date cited*]. Available from: URL: http://www.cdc.gov/pcd/issues/2004/jul/04_0043.htm

Definitions and References

Gross Rating Points

Gross Rating Points (**GRP**) measure the total volume of delivery of your message to your target audience. It is equal to the percent Reach to your target audience times the Frequency of exposure. To arrive at your total Gross Rating Points, add the individual ratings for each media vehicle you are using. You may also get GRP by dividing your gross Impressions by the population base and multiplying the answer by 100.

How Stuff Works. http://money.howstuffworks.com/marketing-tools.htm

Gross Rating Point (GRP)

1. Sum of all rating points over a specific time period or over the course of a media plan; sometimes called *homes per rating point.* The rating of a show represents the percentage of people (or households) tuned in to a television program as compared to the number of television sets in the particular television universe (geographical location). Each rating point is equal to 1%. If a show has a rating of 7 that means that 7% of all persons (or households) who have a television were tuned in to that show (whether the other televisions were turned on or not). If there are two shows on a particular station during a particular time period, and the first show has a rating of 7 and the other a rating of 10, then the GRPs for that time period equal 17.

Media planners use gross rating points as a method of designing a media schedule in an attempt to deliver a maximum number of GRPs at minimum cost. In this instance, GRPs are calculated by multiplying the total reach (the unduplicated audience) of the schedule by the frequency (average amount of exposures) of the insertion in the proposed schedule. The gross rating points then will represent the product of reach and frequency and will express the "gross" duplicated percentage of audience that will be reached by the proposed plan. (It is important to note that GRPs are a percentage. Therefore, if a given market has 1000 television households, each GRP represents 10 viewing households, whereas in a market of 10,000 television households, each GRP represents 100 viewing households. Thus, the largest amount of GRPs does not necessarily mean the largest audience.)

2. In outdoor advertising, percentage of the population that passes an outdoor advertising structure on a daily basis. GRPs are the same as showings.

Answers.com. http://www.answers.com/topic/gross-rating-point

Reach x Frequency = GRPs

If you "reach" 70% of the population 3 times in a week, you are said to have bought 210 GRPs. 70 x 3 = 210. Two hundred GRPs a week is thought to be a reasonable media weight for a sustaining campaign in a total market. If you're introducing a new brand, or running a big sale this weekend, you might buy 300 to 500 GRPs in radio alone, or in radio plus some other media.

Burkhard Works
http://www.burkhardworks.com/Radio_Advertising_Costs.htm

Media Report Viewer

- Reach (%)
    - The number of people exposed to at least one issue in a schedule (as a percentage of the target).
- Average Frequency
    - The average number of issues read by each person in the target market who have been exposed to at least one issue in the schedule.
- Gross Impressions
    - This is the total opportunities to see the campaign or schedule. For example, if a schedule reaches 100 people (i.e. the reach), and the average frequency (i.e. the average number of times a person will see the campaign or schedule) is 6; then the Gross Impressions, or Gross Opportunities to See (as it may be called), will be 600 (ie the reach multiplied by average frequency).
- GRPs Gross Rating Points:
    - These are the Gross Impressions expressed as a percentage of the target market. Therefore, if the Gross Impressions are 600 and the population of the target is 1200, then the GRPs are 50.
- Reach
    - For any schedule, the number of people in the target market exposed to the schedule.
- Total cost
    - The total cost of advertising of a particular schedule.
- Scheduled insertions
    - The total number of insertions in the schedule.
- Number of vehicles
    - The number of titles with at least one insertion in the schedule.
- CPT
    - Whether this is Cost Per Thousand Reach or Cost Per Thousand Gross Impressions, it is the total cost of the schedule divided by either the Reach or the Gross Impressions expressed in thousands.

http://www.tgi.hu/choices3/User%20Guide%20to%20Media%20Report%20Viewer.pdf

Frequency The number of times an average individual has the opportunity to be exposed to an advertising message during a defined period of time. Frequency in outdoor usually refers to the calendar month since this time period coincides with standard contract practices.

Gross Rating Points - GRP The total number of impressions delivered by a media schedule, expressed as a percentage of the population. GRP's for Outdoor generally refer to the daily effective circulation generated by poster panels divided by the market population. Often used interchangeably with "showing". One rating point represents a circulation equal to 1% of the market population.

Impressions This is a term used by media to describe and quantify the number of individuals who have an "opportunity" to see an AD in a given amount of time. See CPM. TruckAds® "Impressions Calculator" can help you determine the CPM's for your truckside advertising campaign. See CPM Calculator.

TruckAds.com
http://www.truckads.com/industry_definitions.htm

http://www.truckads.com/cpm_advertising_impressions_calculator.htm

Gross Rating Points (GRP) - GRPs represent the number of impression opportunities, expressed as a percent of the population of a specific market normally quoted on a daily basis. Gross Rating Points (GRP) - The total ratings of all television shown in a given advertising schedule during a given time period (usually four weeks). Program Rating x # of Announcements = GRPs

Tobacco Documents Online. Ness Motley Documents. Advertising/Marketing Glossary
http://tobaccodocuments.org/ness/21.html

Ratings 101
Neilson Media
http://www.nielsenmedia.com/ratings101.htm

"Click It or Ticket"
National Highway Traffic Safety Administration, Traffic Safety Marketing
http://trafficsafetymarketing.gov/
http://www.buckleupamerica.org/index.htm

Exel-lent Marketing Formulas
Add-in tool for Excel. Trial Version is available. Calculates GRP and about 30 other marketing measures.
http://www.exel-lentmarketingformulas.com/