DOWNLOAD PDF V. 7. QUALITY IMPACTS : INFERENCES FROM THE MEDICAL CARE EVALUATIONS.

Chapter 1 : Program Evaluation Methods 2 / 7

Supported by Health Services Administration contract Includes bibliographical references v. 2. A context for PSRO evaluation: the program and evaluation precedents -- v.

All these, and many others, are effects that require both sophisticated measurement skills and in-depth expertise in a particular area of public policy. Three aspects of measurement deserve careful consideration: Reliability A measurement is reliable to the extent that, repeatedly applied to a given situation, it consistently produces the same results. For instance, an IQ test would be reliable to the extent that, administered twice to the same person whose intelligence has not changed it produces the same score. In a program context, reliability can refer to the stability of the measurement over time or to the consistency of the measurement from place to place. Unreliability may result from several sources. For example, it may arise from a faulty data collection procedure: If an interviewer does not read the interviewing instructions carefully, the results obtained may be somewhat different from those of interviewers who do so. As well, the measurement device or sampling plan could be unreliable. If the sampling procedure is not carried out properly, the sample is not likely to be representative of the population and, therefore, may yield unreliable conclusions. Measurement validity A measurement is valid to the extent that it represents what it is intended to represent. Valid measures indicators contain no systematic bias and capture the appropriate information. Do the data mean what we think they mean? Does the measurement technique indeed measure what it purports to measure? These issues are of critical importance in program evaluation. Measurement validity problems can be conceptual or technical. Without careful thought, it is seldom clear which data best reflect the outcome to be measured. Too often, a decision is based solely on data that happen to be readily obtainable, but which yield measurements that are not as meaningful as might otherwise be obtained. Technical errors such as measurement and sampling errors may also occur, rendering the evaluation results inaccurate. Depth and breadth Related to the reliability and validity of measurements are the concepts of depth and breadth. Depending on the situation, one may wish to measure certain outcomes with great accuracy and others with less detailed accuracy but with several lines of evidence. To measure the benefit of a program to an individual, in-depth interviewing and probing may be required. It may be necessary to have a number of different indicators, all reflecting different perspectives on the impact being considered. For example, in assessing the effect of an industrial assistance grant on a company, it may be necessary to look at resulting sales, changes in the number and quality of jobs, the effect of new machinery purchases on future competitiveness, and the like. On the other hand, a target population for a program may be large and heterogeneous. Here, it may be appropriate for an evaluation to cover all parts of that population, but in less detail. A major problem in dealing with the breadth and depth issue is that limited time and resources will usually force the evaluator to chose between the two. Breadth will lead to greater relevance and validity in terms of coverage. Typically, however, this will mean less depth, validity and reliability in measures of individual subjects. In fact, deciding how much of the outcome is truly attributable to the program, rather than to other influences, may be the most challenging task in the evaluation study. The key to attribution is a good comparison. In laboratory settings, rigorously controlled comparison groups meet this need. In the case of federal government programs, less rigorous comparisons are generally possible and may be subject to many threats to internal validity and to external validity. The following are the most common such threats to internal validity: Several threats to external validity also exist, which means that there are limits to the appropriateness of generalizing the evaluation findings to other settings, times and programs. In the federal government context, external validity is always a major concern since evaluation findings are usually meant to inform future decision-making. Selection and program interaction-effects on the program participants are not representative because of some characteristic of the people involved that is important to effects is not typical of the wider population; Setting and program interaction-the setting of the experimental or pilot program is unrepresentative of what would be encountered if the full program was implemented; and History

and program interaction-the conditions under which the program took place are not representative of future conditions. It is obviously very useful in selecting evaluation strategies to be aware of the likely threats to validity. Much of the ingenuity in evaluation design, and in the ensuing data collection and analysis, lies in devising ways of establishing the effects attributable to the program. One does this by setting up good comparisons that avoid as many threats to validity as possible. For an evaluation focusing on results, designs differ mainly in how well they perform the task of establishing attributable program effects and, where appropriate, how readily the conclusions can be generalized. Research Design Campbell, D. Experimental and Quasi-experimental Designs for Research. Designs and Analysis Issues for Field Settings. A Systematic Approach, 2nd ed. Ryan, Brenda and Elizabeth Townsend. This implies an understanding of the decision-making environment to which the evaluation findings will be introduced. Developing an approach for evaluating program outcomes can become a very challenging task, one that involves more art than science. An appreciation of the technical strengths and weaknesses of various possible strategies for gathering evidence must be combined with an appreciation of the environment within which the evaluation takes place. This balancing must be done within the constraints imposed by limited resources and time. A combination of research and management experience is clearly required. When evaluation approaches are being put together as options during the assessment planning stage, the question that should be repeatedly asked is "Will the recommended method option provide adequate evidence in relation to the issues of concern, on time and within budget? Each of these general considerations and associated issues is described below. Note that these considerations are relevant to all evaluation issues, not just those related to program outcomes. Evidence is gathered so that conclusions can be formulated about the issues addressed. The need is for objective and credible conclusions that follow from the evidence and that have enough supporting evidence to be believable. Coming up with such conclusions, however, can be difficult. The evaluator should be thinking of this when developing the evaluation strategy. Furthermore, credibility is, in part, a question of how the conclusions are reported: The evidence collected and conclusions reached should be objective, and any assumptions should be clearly indicated. Objectivity is of paramount importance in evaluative work. Evaluations are often challenged by someone: Objectivity means that the evidence and conclusions can be verified and confirmed by people other than the original authors. Simply stated, the conclusions must follow from the evidence. Evaluation information and data should be collected, analyzed and presented so that if others conducted the same evaluation and used the same basic assumptions, they would reach similar conclusions. This is more difficult to do with some evaluation strategies than with others, especially when the strategy relies heavily on the professional judgement of the evaluator. In particular, it should always be clear to the reader what the conclusions are based on, in terms of the evidence gathered and the assumptions used. When conclusions are ambiguous, it is particularly important that the underlying assumptions be spelled out. Poorly formulated conclusions often result when the assumptions used in a study are not stated. The conclusions must be relevant to the decision environment and, in particular, must relate to the issues addressed. Several potential reasons exist for this. It is possible, for instance, that the evaluation strategy was not well thought out beforehand, preventing valid evidence from being obtained on certain issues and preventing certain conclusions from being drawn. Alternatively, the interests of the evaluator could take over a study, resulting in inadequate attention to the concerns of senior management. Finally, additional issues may arise as the program and its environment are explored. However, this should cause no problem as long as the original issues are addressed and the additional issues and related conclusions are clearly identified as such. The accuracy of the findings depends in large part on the level and type of evidence provided. The choice of the level and type of evidence should be made on the basis of contextual factors. Two common problems in evaluative work are the frequent impossibility of coming up with definitive conclusions, and the incompleteness of the evidence provided by the individual strategies available. In relation to the first problem, causal relationships between a program and an observed outcome often cannot be unequivocally proven, mainly because of the intractability of the measurement and attribution problems discussed earlier. Generally speaking, no single evaluation strategy is

likely to yield enough evidence to answer unambiguously the questions posed by the evaluation. This leads us directly to the second problem, the incompleteness of any single evaluation strategy. There are typically several possible evaluation strategies, each yielding a different level and type of evidence. The choice of strategies should be made on the basis of contextual factors related to the decisions about the program that have to be made-not solely on the basis of pre-set research considerations. The situation parallels that in law, where the type of evidence required depends on the seriousness and type of crime. Contextual factors that the evaluator should consider include the existing degree of uncertainty about the program and its results, the importance of the impact of the program, its cost, and the likelihood of challenges to any conclusions reached. The evaluator should be aware of any potential serious challenges to the conclusions and be ready to present appropriate counter-arguments. The choice of the appropriate evidence to gather-and hence the choice of the evaluation method to use-is one the most challenging that the evaluator faces. Ideally, the client of the study, not the evaluator, will make the choice. The task of the evaluator is to present the client with various evaluation approaches which, among other things, offer a reasonable trade-off between the expected credibility of the conclusions and the cost and time of the evaluation method. In selecting an approach, the client should have a good understanding of what evidence will be produced, and therefore be able to judge whether the rigour of the evaluation will be appropriate to the decisions that will follow. The evaluator should, of course, develop possible approaches that reflect the known decision environment, hence making it easier for the client to decide. The conclusions reached should be based on a comprehensive coverage of the relevant issues. Comprehensiveness, or the lack thereof, is another common problem in evaluative work. This is a macro-measurement concern. This includes exploring all issues of concern that time and financial resource constraints allow. Remember that where the federal government is concerned, the "client" is, ultimately, the Canadian public. Breadth may be difficult to achieve at times, but if it is sacrificed for greater depth of analysis in the remaining issues covered, there is a real danger that the conclusions reached will be narrowly accurate but lacking in perspective. This danger can usually be avoided by discussing the evaluation issues with both the client and others holding varying views. An appropriately broad evaluation strategy will likely follow from this process.

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Chapter 2 : Science Clips - Volume 7, Issue 12, March 24,

Acute care utilization review impact: some data on the medicare -- v. 4. Acute care utilization review impact: inferences from a sample of hospital abstract data -- v.

This article has been cited by other articles in PMC. Health and well-being are often restricted to the characterization of sensory qualities in certain settings such as unrestricted access to healthcare, effective treatment, and social welfare. The patients admitted to tertiary health care facilities are generally able to present themselves with a holistic approach as to how they experience the impact of health policy. The statistical results indicated that patients reported a very limited correlation between QoC and QoL in both settings. Even though the two settings are theoretically different in terms of being able to conceptualize, adopt, and implement QoC, the outcomes from both settings demonstrated insignificant relationships with QoL as the results were quite similar. Though modern medicine has substantially improved QoL around the world, this paper proposes that health accreditation has a very limited impact on improving QoL. This paper raises awareness of this topic with multiple healthcare professionals who are interested in correlating QoC and QoL. Hopefully, it will stimulate further research from other professional groups that have new and different perspectives. Addressing a transitional health care system that is in the process of endorsing accreditation, investigating the experience of tertiary cases, and analyzing deviated data may limit the generalization of this study. As QoC accreditation does not automatically produce improved QoL outcomes, the proposed study encourages further investigation of the value of health accreditation on personal and social well-being. Although alleviating pain and its consequences is one of the major goals of medicine, 6 the current trend of healthcare regulations in many health systems focuses on hospitals, 7 and not on patients nor their needs and expectations. Health regulations, which once served the community, now serve the health institutions. With respect to hospitalization, these concepts may reveal substantial effects on social welfare. The unintended consequence of improving quality of life QoL is often hindered by our dominant logic about the effectiveness of some health policies. The simple question that is raised here is: Health care accreditation Perhaps the most prevailing and implemented health policy worldwide in the last three decades is health accreditation. The prevalence of hospital accreditation has increased as hospital quality standards have improved. The assessment represents a measure of the level of compliance to prescribed standards of the healthcare service. For instance, high levels of preventable injuries among inpatients can be easily addressed through compliance of inpatient healthcare standards. Many health researchers and organizations claim that the aim of healthcare quality is to attain optimal health outcomes. In a bureaucratic and centralized system, the Ministry of Health MOH ; as a single body finances, controls, and regulates the SA healthcare system. The government, as the principal provider of healthcare, introduced the Central Board of Accreditation for Healthcare Institutions CBAHI , thereby ensuring all national hospitals now have effective clinical management, in addition to qualified staff, to improve the quality of healthcare delivery. The accreditation of 21 public hospitals has prompted many other hospitals and health professionals to consider the value of hospital accreditation on QoL. The Riyadh Health Directorate RHD undertakes frequent and random assessments to ensure quality improvement processes are in place, and that patient care and treatment are continuously updated, improved, and visible. Containing more than standards, the CBAHI manual is based on comparable international standards 18 with a culturally tailored orientation to reflect cultural sensitivities, conditions, and requirements. All health standards are now measured against these performance indicators, whose primary focus is to improve and underpin current hospital performance. Although accreditation standards are comparable worldwide 19 and are an essential part of the SA healthcare system, the IOM stresses its significance in contributing to optimizing organizational performance: These KPIs are subjective and internally defined, and they are subject to reasonable criteria. In designing a study to assess health standards, KPI selection should also consider the level of influence that a provider can hold. Once essential KPIs have been determined, how to measure them must

then be decided. Hospital accreditation, however, does not always produce improved outcomes. For example, Sack et al 28 found no significant relationships between accredited hospitals ACCHs and patient satisfaction. In fact, patients did not choose ACCHs because of their accreditation or because of the QoC they offered, but because of other factors such as patient satisfaction. Despite this, many healthcare policies and health services organizations continue to focus almost exclusively on attaining health accreditation in the belief that it is a major achievement for a health institution. The CBAHI, which introduced these standards, considers patient safety and expectation as the priority when delivering healthcare services. Health accreditation has gained international and national attention. While highlighting the importance of implementing QoC, CBAHI cites patient expectations, better outcomes, and safety as their priorities for health services management and policymakers alike. Effectiveness ensures that the healthcare provided involves the patient in its decision making and adopts certain institutional quality measures such as patient rights and safety. The primary purpose of QoC is to ensure that the quality of patient care is in accordance with contemporary established guidelines. Conversely, they may face obstacles when accessing the clinics, for example a lack of a particular medical service could force them to seek out a different health facility. While the first situation emphasizes access functionality, the second pertains to health continuity under the right service availability. Both scenarios increase the likelihood of the irrational utilization of health services, and also place a greater financial burden on the patient and the hospital. Nowadays, patients worldwide do not have adequate access to a national network of hospitals and clinics, nor can they obtain the local and basic medical treatment they might need. Sophisticated surgical procedures, such as open heart surgery and organ transplants, are routinely performed in most of the middle- and upper-economic countries by medical professionals who meet the highest international standards. In addition, medications are readily available to patients at a low cost since, in most cases, the government subsidizes such medical needs. The simple question that arises here is whether a hospital can offer actual tertiary healthcare services once a patient has accessed the hospital. These factors are mainly related to admission procedures, 36 bed availability, 37 having a flexible appointment in outpatient departments, 38 and cooperative staff. Effectiveness of treatment in healthcare organizations Some medical professionals and health care researchers have expressed concerns about the effectiveness and appropriateness of many contemporary and emerging medical practices. Effective outcomes provide the practical and relevant evidence that is needed to inform real-world healthcare decisions regarding patients, providers, and policymakers. By doing the right thing for the right reasons, an organization is acting in the best interests of the patient, the staff, the institution, and society in general. Together, these factors produce a highly effective system. These criteria ultimately describe how the hospital depends upon compliance with certain rules and regulations established by accreditation. Ensuring the implementation of beneficial QoC tools encompasses legal and ethical issues in the providerâ€”patient relationship. In non-medical institutions, obtaining accreditation is usually associated with better performance. Though it is a subjective gauge, it is an additional measurement of health outcomes that can provide, for example, physician reporting on improvements in their patients. A single index of health status is both feasible and highly desirable. Due to its complexity, which involves multidisciplinary factors and the impact of long periods of time, it is rare to track the outcomes of health programs. In essence, it is an interpretation of how a hospital has succeeded or failed. It describes the cultural norms and beliefs that the hospital managers espouse and the standards they adopt. For instance, in hospitals that employ staff from all over the world, standardization is not only useful, it is essential. It ensures that staff members who come from different medical backgrounds will work to a set of uniform and acceptable standards, irrespective of their education or training. In this sense, dominant logic is a common way of thinking about standardization across different departments. Some of the restrictive and rigid protocols adopted by corporations have the unfortunate effect of stifling free thought and innovation, causing health management professionals to consider standards in a one-dimensional, superficial way. Prahalad and Bettis 61 suggested that the manner with which top managers deal with the increasing diversity of strategic decisions in an organization depended on the cognitive orientation of top managers only. Accordingly, process logic

consists of the mental maps developed through knowledge and experience in the core health industry. Instead of treating employees as assets who have knowledge and experience, and who can, and should, participate in improving health performance, members of staff are actively discouraged to openly reveal what they believe. Almost all of them are instructed to closely follow certain standards within a specific paradigm, thus perpetuating a 19th century management style which elevates machine activity above human activity. Delegation of authority is a common function of management. The practice of change management and the authority and delegation of certain powers to subordinates are central in allowing an organization to function as a well-oiled machine. Standardization is viewed as a tool that will automatically lead to improvement within a health service; achieving accreditation is seen as concrete evidence of that improvement. However, with so much focus on achieving accreditation, there is very limited opportunity for management to practice basic management functions, such as delegation of authority. While staff should be encouraged and trained to deliver improvements and innovations to health services, standardization means they are not. Rather management teams that focus on standardization may affect staff behaviors, which actually prevent staff from promoting change and innovation, and thus compromising patient health outcomes. The literature does not yet adequately describe the potential capabilities, utility, or components of both types of activities Table 4.

Chapter 3 : Quality of Care and Quality of Life: Convergence or Divergence?

Evaluation of the Impact of Accreditation on the Delivery of Quality of Care and Quality of Life to Residents in Australian Government Subsidised Residential Aged Care Homes. Canberra, Australia: Department of Health and Aging;

Indeed, the design of surveys should typically involve people with expertise in the field. Because surveys are so frequently used in evaluation, this appendix is included to give a more detailed overview of the major factors to consider in designing a survey. This appendix is not, however, a substitute for consultation with experts in the field. Three basic elements are involved in survey research: Each element will be briefly discussed below and the major problem areas discussed. The scope and the nature of the sampling procedure should be geared to three specific requirements: The need for the findings to be generalized to the appropriately defined population Whenever conclusions are made about a whole population based on a sample survey, the evaluator must be sure that findings from the survey can be generalized to the population of interest. If such a need exists, a probability sample as opposed to a non-probability sample is usually required. Evaluators must be very alert to the possibility of statistical biases. A statistical bias usually occurs when a non-probability sample is treated as a probability sample and inappropriate inferences are drawn from it. Statistical bias is often the result of an inappropriate or careless use of probability sampling procedures. The need for minimum precision requirements The precision and the confidence level required in the survey must be stated. Statistical theory can provide estimates of sampling error for various sample sizes-that is, the precision of the estimates. The sample size should therefore be a function of the required level of precision. Evaluators should be more concerned with precision than with sample size alone. It is worth noting at this stage that there are different sample size formulas for different sampling procedures and different types of measurements estimates , including the magnitude of a characteristic of the population and the proportion of the population in some category. It is not uncommon to find that one has used the wrong formula to compute the minimum sample size required. The need to keep sampling cost within budget constraints Certain sampling procedures, such as stratified sampling and replicate design, have been developed to reduce both the sample size and the cost of actually performing measurements. Sophistication in sampling can be cost effective. Once these three requirements are specified, the sampling process can be established. This involves six steps. This definition must be detailed specifically, and often includes time, location and socio-economic characteristics. A sampling frame is a list of the elements of the population such as names in a telephone book, an electoral list or a list of recipients on file. If a sampling frame does not exist, it may have to be created partially or wholly through a sampling strategy. This is the unit for sampling, and might be the geographic area, a city block, a household or a firm. This is the method by which the sampling units are to be selected and might be systematic or stratified sampling, for example. Decide how many sampling units and what percentage of the population are to be sampled. Non-sampling errors may occur at each stage of this process. For example, the population defined may not match the target population, or a sampling frame may not correspond exactly to the population. When these problems occur, resulting measurements or inferences can be biased and, hence, misleading. For example, suppose that a survey of fund recipients was part of the evaluation of an industrial assistance program. Suppose that the sampling frame of companies included only those receiving more than a certain amount of money. Clearly, any generalization of the results to the population of all recipients of funds would not be valid if based on a sample chosen from this frame. Non-sampling errors may also occur during virtually all of the survey activities. Respondents may interpret survey questions differently, mistakes may be made in processing results, or there may be errors in the frame. Non-sampling errors can occur in both sample surveys and censuses, whereas sampling errors can occur only in sample surveys. The choice of the collection technique is extremely important for any survey that depends on individual responses. The three basic procedures are discussed below. Telephone Interviewing To sample, the interviewer starts with a sampling frame containing phone numbers, chooses a unit from this frame, and

conducts an interview over the telephone, either with a specific person at the number or with anyone at that number. A second technique is called random digit dialling, where, as the name suggests, the interviewer dials a number, according to some probability-based dialling system, not knowing whether there definitely is a live connection at that number or not, or whether it is a business, hospital or household. In practice, list sampling and the random digit dialling techniques are used together. For example, it is common practice to use random digit dialling to produce an initial list of random numbers. Using a random mechanism, numbers are then taken from this list to produce a final set for the sample. Personal Interviewing There are three basic approaches to collecting data through interviewing. All three should be considered in personal interviewing. While all three are possible in telephone interviewing, it is extremely rare that either one of the first two is optimal approach. Each technique includes different types of preparation, conceptualization and instrumentation. Each technique has its advantages and disadvantages. The three alternatives are as follows: Informal conversational interview This technique relies entirely on spontaneous questions arising from the natural flow of a conversation, often as part of an ongoing observation of the activities of the program. During this kind of interview, the people being talked to may not even realize that they are being interviewed. The strength of this technique is that it allows the evaluator to respond to individual and situational differences. Questions can be personalized to establish in-depth, non-threatening communication with the individual interviewees. It is particularly useful when the evaluator is able to explore the program over a long period of time, so that later interviews build on information obtained in earlier interviews. The weakness of the informal conversation is that it requires a great deal of time to collect systematic information, because it may take several conversations before a uniform set of questions has been covered. This interview is also more open to interview effects and biases, since it depends to a large extent on the skills of the individual interviewers. Interview guide An interview guide is a list of issues or questions to be raised during the interview. It is prepared to ensure the same basic material is covered in all interviews. The guide provides topics or subject areas within which the interviewer is free to probe to obtain more complete information about the particular subject. In other words, it is a framework within which the interviewer develops questions, sequences those questions and makes decisions about which information to pursue in greater depth. The strength of the interview guide is that it ensures the interviewer uses limited time to the best advantage. It helps make interviewing more systematic and comprehensive by directing the issues to be discussed in the interview. It is especially useful in group interviews, where a guide keeps the discussion focused, but allows individual perspectives to be identified. There are several potential deficiencies to the technique. Using the interview guide, the interviewer may still inadvertently omit important topics. Interviewer flexibility in sequencing and wording questions can greatly reduce the comparability of the responses. The process may also appear more threatening to the interviewee, whose perception of an interviewer also affects the validity and reliability of what is recorded. Standardized format interview When it is desirable to obtain strictly comparable information from each interviewee, a standardized format may be used, in which each person is asked essentially the same questions. Before the interviews begin, open-ended and closed-ended interview questions are written out exactly as they are to be asked. Any clarifications or elaborations are written into the interview itself, as are any possible probing questions. The standardized interview minimizes interviewer bias by having the interviewer ask the same questions of each respondent. The interview is systematic, and needs minimal interviewer judgement. This technique also makes data analysis easier, because it is possible to organize questions and answers that are similar. Another benefit is that decision makers can review the exact instrument before the interviews take place. Also, the interviewer is highly focused, which usually reduces the duration of the interview. The weakness of this technique is that it does not allow the interviewer to pursue issues that may only emerge in the course of the interview, even though an open-ended questionnaire reduces this problem somewhat. A standardized interview restricts the extent to which individual differences and circumstances can be taken into account. Combinations In evaluation studies, a combination of the interview guide and standardized techniques is often found to be the best approach. Thus, in most cases, a number of

questions will be worded in a predetermined fashion, but the interviewer is given flexibility in probing and gauging when it is appropriate to explore subjects in greater depth. A standardized interview format is often used in the initial parts of each interview, with the interviewer being freer to pursue other general subjects of interest for the remainder of the interview. Mail-out Survey The third basic survey method is a survey mailed to the respondent, who is expected to complete and return it. To keep response rates high and analysis meaningful, most mail-out surveys consist primarily of closed-ended questions. The advantage of mail-out questionnaires is that they are a cheap method of obtaining broad coverage. The advantage of quantitative closed-ended questions is that data analysis is relatively simple. Responses can be directly compared and easily aggregated. The disadvantage is that respondents must fit their experience and views into predetermined categories. This can distort what respondents really mean by limiting their choices. To partially overcome these difficulties, open-ended questions are often added to mail-out surveys. This allows participants to clarify and amplify their responses. One of the major difficulties with mail-out surveys is non-response. Non-response is also a problem with personal and telephone surveys, but it is much more problematic with mail-out surveys. Non-response can be caused by many factors, including unavailability of respondents or refusal to participate in the survey. Three strategies are often used to increase the response rate: In the first case, non-respondents are eventually telephoned and urged to complete the questionnaire. The second strategy involves taking a sample of non-respondents, and completing the survey with them through a telephone or personal interview. Weighting the results from these interviews, so that they represent the non-respondent population as a whole, and then combining the results with the respondent population allows for unbiased generalizations to the overall population. For this technique to be valid, the non-respondents must be sampled scientifically. The third case, the use of follow-up mailed questionnaires, is similar to the use of telephone calls, although usually less effective. After a certain period of time, questionnaires are again mailed to non-respondents with a request for completion.

Chapter 4 : Program Evaluation Methods 7 / 7

The Secretary's Report on the Evaluation of the Medicare Coordinated Care Demonstration is based on analysis by Mathematica Policy Research.

This article has been cited by other articles in PMC. Abstract Background Although public health guidelines have implications for resource allocation, these issues were not explicitly considered in previous WHO pandemic preparedness and response guidance. In order to ensure a thorough and informed revision of this guidance following the H1N1 pandemic, a systematic review of published and unpublished economic evaluations of preparedness strategies and interventions against influenza pandemics was conducted. Methods The search was performed in September using 10 electronic databases, 2 internet search engines, reference list screening, cited reference searching, and direct communication with relevant authors. Full and partial economic evaluations considering both costs and outcomes were included. Conversely, reviews, editorials, and studies on economic impact or complications were excluded. Studies were selected by 2 independent reviewers. Results 44 studies were included. Although most complied with the cost effectiveness guidelines, the quality of evidence was limited. However, the data sources used were of higher quality in economic evaluations conducted after the H1N1 pandemic. Vaccination and drug regimens were varied. Pharmaceutical interventions vary from cost saving to high cost effectiveness ratios. According to ceiling thresholds Gross National Income per capita , the reduction of non-essential contacts and the use of pharmaceutical prophylaxis plus the closure of schools are amongst the cost effective strategies for all countries. However, quarantine for household contacts is not cost effective even for low and middle income countries. Conclusion The available evidence is generally inconclusive regarding the cost effectiveness of preparedness strategies and interventions against influenza pandemics. Studies on their effectiveness and cost effectiveness should be readily implemented in forthcoming events that also involve the developing world. Guidelines for assessing the impact of disease and interventions should be drawn up to facilitate these studies. Introduction When a new subtype of influenza A virus which is infectious to humans gains human-to-human transmissibility efficiently enough to cause community level outbreaks, this virus is said to have pandemic potential. If this new subtype spreads globally causing disease and deaths, it becomes pandemic. Since the 16th century, influenza pandemics have occurred at intervals ranging between 10â€”50 years, creating varying levels of impact on societies. It spread to all continents in less than nine weeks becoming the first pandemic of the 21st century. Children, young adults, pregnant women, and those with chronic illnesses were disproportionately affected and constituted the majority of the hospitalization cases. The estimated case fatality rate was 0. For some recommendations, evidence is limited to observations or epidemiological models. In some cases, inferences are drawn from other respiratory infectious diseases, such as seasonal influenza or severe acute respiratory syndrome. With a view to incorporating important experience and evidence acquired during the H1N1 pandemic, the WHO will revise its pandemic preparedness guidelines. Including cost effectiveness evidence in the revision process will strengthen the guidance by providing a framework to prioritize the allocation of limited resources in impending, high risk times. The aim of this paper is to systematically review published and unpublished economic evaluations of interventions to control and prevent human influenza pandemics. Funded by the WHO, this study describes and assesses the identified studies and determines patterns in cost utility ratios. The findings are expected to contribute to the revision of the WHO guidance on pandemic influenza, potentially support policymakers to make informed decisions on allocating resources effectively, and identify gaps for future research. To retrieve additional grey literature reports and conference proceedings, the search was expanded by using the generic search engine Google www. Furthermore, reference lists of relevant publications were screened. Additional reports were obtained through correspondence between one reviewer RPV and authors of eligible studies and conference abstracts. Free text terms in other languages were also employed when appropriate. Search strategies applied to electronic data sources, and outputs are shown in

Table S1 and S2. Discrepancies were resolved by a third reviewer YT. The papers were included in the analysis if they met the criteria shown in Table 1. Table 1 Inclusion and exclusion criteria employed in the abstract selection process. The articles were grouped according to type of evaluation as follows: The studies were appraised in two different ways for quality assessment purposes following approaches employed by Teerawattananon et al. Second, studies were assessed according to the quality of evidence used, since it is widely recognized that the credibility of economic evaluations depends not only on the appropriateness of the methods employed but also on the input evidence. Several types of evidence are evaluated according to their level of quality: The data sources of each component are ranked from one to six in descending order. Rank 1 is given if parameters are derived from the most appropriate data sources. This study converted cost effectiveness ratios into a common currency and utility unit. Because of the lack of explicit and implicit thresholds for most countries to determine which interventions are cost effective, the World Bank thresholds for classifying countries into low income, lower middle income, upper middle income, and high income countries according to Gross National Income GNI per capita were used as maximum ceiling thresholds. Results Review profile The search in the electronic databases identified a total of records. In addition, records were identified through internet search engines. There were 98 records that met the inclusion criteria and were assessed for eligibility, while 56 full texts were not included in the final analysis. These studies were excluded because they were reviews 14 , were not economic evaluations 9 , focused on seasonal influenza 6 , focused on the impact of influenza 7 , had no full text available for some conference abstracts 9 , were not in the eligible languages 1 , or did not report both the costs and outcomes of interventions In addition, eight full text papers were identified from correspondence with authors of eligible papers, cited reference searching, and reference list screening, of which six were excluded as they studied the impact of disease 2 or were not economic evaluations 4. Finally, 44 studies were considered in our analysis Figure 1.

Chapter 5 : Science Clips - Volume 10, Issue 15, May 1,

Results. 44 studies were included. Although most complied with the cost effectiveness guidelines, the quality of evidence was limited. However, the data sources used were of higher quality in economic evaluations conducted after the H1N1 pandemic.

Social distancing is one of the community mitigation measures that may be recommended during influenza pandemics. Social distancing can reduce virus transmission by increasing physical distance or reducing frequency of congregation in socially dense community settings, such as schools or workplaces. We conducted a systematic review to assess the evidence that social distancing in non-healthcare workplaces reduces or slows influenza transmission. Data extraction was done by two reviewers independently. A narrative synthesis was performed. Fifteen studies, representing 12 modeling and three epidemiological, met the eligibility criteria. The epidemiological studies showed that social distancing was associated with a reduction in influenza-like illness and seroconversion to influenza A H1N1. However, the overall risk of bias in the epidemiological studies was serious. It also delayed and reduced the peak influenza attack rate. The reduction in the cumulative attack rate was more pronounced when workplace social distancing was combined with other nonpharmaceutical or pharmaceutical interventions. However, the effectiveness was estimated to decline with higher basic reproduction number values, delayed triggering of workplace social distancing, or lower compliance. Modeling studies support social distancing in non-healthcare workplaces, but there is a paucity of well-designed epidemiological studies. We investigated trends in HIV prevalence and incidence in a high burden area in western Kenya in In , , and , population-based surveys were done via a health and demographic surveillance system and home-based counselling and testing in Gem, Siaya County, Kenya, including 28 , 17 , and 16 individuals aged years. Data on demographic variables, self-reported HIV status, and risk factors were collected. Rapid HIV testing was offered to survey participants. Participants were tracked between surveys by use of health and demographic surveillance system identification numbers. HIV prevalence was calculated as a proportion, and HIV incidence was expressed as number of new infections per person-years of follow-up. HIV prevalence was stable in participants aged years: HIV incidence was HIV incidence is still high and not close to the elimination target of one per person-years. We examined characteristics of HIV and viral hepatitis coinfections by using surveillance data from 15 US states and two cities. Each jurisdiction used an automated deterministic matching method to link surveillance data for persons with reported acute and chronic hepatitis B virus HBV or hepatitis C virus HCV infections, to persons reported with HIV infection. Of the persons living with diagnosed HIV infection at the end of , 2. Of the persons ever reported with HBV, 5. Of the 1 persons ever reported with HCV, 4. Matching HIV and viral hepatitis surveillance data highlights epidemiological characteristics of persons coinfected and can be used to routinely monitor health status and guide state and national public health interventions. Mortality in multidrug-resistant MDR tuberculosis-human immunodeficiency virus HIV coinfection has historically been high, but most studies predated the availability of antiretroviral therapy ART. Participants received standardized MDR tuberculosis and HIV regimens and were followed monthly for treatment response, adverse events, and adherence. The primary outcome was survival. We classified men as care-engaged or not at the time of the interview, and conducted content analysis of the interview transcripts to identify barriers and facilitators to engagement. Respondent mean age was Slightly more than a third Sustained engagement began with overcoming denial after diagnosis and having treatment plans, as well as having conveniently located care facilities. Engagement also was facilitated by services tailored to meet multiple patient needs, effective patient-provider communication, and providers who show empathy and respect for their patients. Respondents were less likely to be care-engaged when these factors were absent. To optimize care engagement, our findings underscore the value of 1 convenient multipurpose HIV care facilities that meet patient needs; 2 excellent provider-patient communication that reinforces respect, trust, and HIV treatment literacy; and 3 assisting PLWH to create personalized treatment

plans and overcome possible challenges such as diagnosis denial. Evidence from recent studies assessing the impact of school water, sanitation and hygiene WASH interventions on child health has been mixed. Self-reports of disease are subject to bias, and few WASH impact evaluations employ objective health measures to assess reductions in disease and exposure to pathogens. We utilized antibody responses from dried blood spots DBS to measure the impact of a school WASH intervention on infectious disease among pupils in Mali. We randomly selected 21 beneficiary primary schools and their 21 matched comparison schools participating in a matched-control trial of a comprehensive school-based WASH intervention in Mali. Data were analyzed using a linear latent variable model. Evidence of enteric disease was lower among pupils attending schools benefitting from school WASH improvements than students attending comparison schools. These findings support results from the parent study, which also found reduced incidence of self-reported diarrhea among pupils of beneficiary schools. DBS collection was feasible in this resource-poor field setting and provided objective evidence of disease at a low cost per antigen analyzed, making it an effective measurement tool for the WASH field. The trial was registered at ClinicalTrials. In the illustrative scenario we examined, emerging ceftriaxone resistance could lead to 1. Influenza Other Respir Viruses. We estimate their prevalence and associated symptoms among college students identified via a social network study design. Human coronaviruses HCoVs [HCoV-NL63 was the most frequent virus detected 6 days following symptom onset 8. During a 3-month period covering a single season, HCoVs were common, even among social contacts without respiratory symptoms; specific symptoms may change over the course of HCoV-associated illness and were similar to symptoms from influenza and rhinovirus. This article is protected by copyright. Awareness of HIV-infection goes beyond diagnosis, and encompasses understanding, acceptance, disclosure and initiation of the HIV-care. This analysis was nested in a prospective cohort established in southern Mozambique which conducted three HIV-testing modalities: Participants were given the opportunity to self-report their status to lay counsellors and HIV-positive diagnoses were verified for previous enrolment in care. Those who did not report their serostatus prior to testing, and were found to have a previous HIV-diagnosis, were defined as non-disclosures. Venue-stratified descriptive analyses were performed and factors associated with non-disclosure were estimated through log-binomial regression. In the first round of adults randomized for HBT, were eligible for testing and Of those tested with a positive result, Similar prevalence of non-disclosures was found in clinical-testing modalities, Prior history of missed visits adjusted prevalence ratio APR 4. More than one-third of individuals testing HIV-positive did not disclose their previous positive HIV-diagnosis to counsellors. This proportion varied according to testing modality and age. In the absence of an efficient and non-anonymous tracking system for HIV-testers, repeat testing of non-disclosures leads to wasted resources and may distort programmatic indicators. Developing interventions that ensure appropriate psychosocial support are needed to encourage this population to disclose their status and optimize scarce resources. Yet, gaps in care exceeding 6 months are common. In an observational cohort using US patients, we examined the association between gap length and changes in viral load status and sought to determine the length of the gap at which significant increases in viral load occur. We identified patients with gaps in care greater than 6 months from patients from six US HIV clinics. We examined visit gap lengths in association with two viral load measurements: Detrimental effects on viral load after a care gap were greater in young patients, black patients, and those without private health insurance. On average, shorter gaps in care were not detrimental to patient viral load status. HIV primary care visit intervals of 6 to 9 months for select patients may be appropriate. Within the remaining two regions with endemic poliomyelitis African and Eastern Mediterranean , Afghanistan, Nigeria, and Pakistan have never interrupted transmission of wild poliovirus WPV. AFP surveillance is supplemented by environmental surveillance for polioviruses in sewage from selected locations. Genomic sequencing of isolated polioviruses enables the mapping of transmission by time and place, assessment of potential gaps in surveillance, and identification of the emergence of VDPVs 3. Surveillance strengthening activities are needed in specific countries of these regions to provide evidence supporting ultimate certification of the interruption of poliovirus circulation. Case incidence and the serial

interval time between symptom onset in primary and secondary cases were used to assess trends in the effective reproduction number R average number of secondary cases generated per case. A mathematical model was parameterized by early R values to determine outbreak size and duration if containment measures had not been initiated, and the impact of vaccination. Vaccination may not account entirely for transmission reductions, suggesting changes in community behavior social distancing and other control efforts isolation, quarantining are important. Our findings highlight the benefits of measles outbreak response and of understanding behavior change dynamics.