

Ethical Guidelines for Observational Studies

**Observational Research,
Audits and Related Activities**

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Foreword

Observational studies benefit all of us. For example, they show us whether our services are safe and effective, they tell us whether chemicals in the environment are harmful, they enable us to deal with clusters of disease and outbreaks of infection by determining their source, and they monitor the state of our country's health in key areas. In short, observational studies give us vital evidence about our health and how best to protect and improve it. They do this by using personal information for public good. To do it well they must meet high ethical standards.

Observational studies are relatively low-risk. There are two main reasons for this. In these studies, the investigators observe and analyse information about health or disability but do not alter the care or services that people receive, and secondly, there is generally a reduced potential for conflict between the investigator role and the clinician role. Observational studies differ from intervention studies, in which investigators intentionally alter people's care or services to study the safety and benefit of doing so.

The following Ethical Guidelines for Observational Studies ("Guidelines") are intended to facilitate high quality studies, protect the interests of participants, and underpin public assurance of good study conduct. They are published here together with a two-page summary guidance sheet for easy reference.

The Guidelines have several internationally significant features. One of these is their wide scope, covering observational research, and audits and other activities that are related to observational research. These other activities are: programme evaluation, evaluation studies, quality assurance activities, outcome analysis, benchmarking, public health investigations, public health surveillance, pharmacovigilance, and resource utilisation review. Second, the Guidelines are directed primarily to investigators, who have ethical responsibility for good study conduct. They are also directed to ethics committees that review studies against established ethical standards, and to other interested communities and individuals. Third, the Guidelines are structured around the process of study conduct, from formulation of the study question through to dissemination of its findings. Fourth, the Guidelines set out the circumstances, mainly related to risk, in which observational studies require ethics committee review.

The Guidelines base their requirements for ethical review on the principle that intensity of ethical scrutiny should be proportional to the level of risk of the activity. On this basis, they state that: observational research requires ethics committee review; audits and related activities do not require ethics committee review unless there is a specified requirement for this; and public health investigations do not require ethics committee review. For audits and related activities and for low-risk observational research, ethics committee review should take an expedited form. For operational information about ethics committee review, see: <http://www.newhealth.govt.nz/ethicscommittees/>

The National Ethics Advisory Committee has generated the Guidelines through a thorough and inclusive process over three years. This has included a questionnaire to ethics committee members and researchers, public consultation on two discussion documents, interviews and group meetings with key informants and public agencies, a cross-sectoral workshop, and an independent peer review report. The Guidelines reflect the many improvements suggested by a wide range of stakeholders through these processes. The Committee is grateful to all those who have contributed.



Andrew Moore
Chair
National Ethics Advisory Committee

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1 Introduction

- 1.1 These Ethical Guidelines for Observational Studies: Observational Research, Audits and Related Activities (Guidelines) are issued in accordance with the statutory function of the National Advisory Committee on Health and Disability Support Services Ethics (National Ethics Advisory Committee (NEAC)), under the New Zealand Public Health and Disability Act 2000, section 16, to “determine nationally consistent ethical standards across the health sector”. The Guidelines are also developed in accordance with the Minister of Health’s request that NEAC:
 - develop guidelines on conducting observational studies in an ethical manner and establish the parameters for the ethical review of observational studies (including guidance regarding weighing up the harms and benefits of this type of health research) (Minister of Health, 2001, 2004).
- 1.2 The Guidelines constitute “ethical standards”, for the purposes of the Code of Health and Disability Services Consumers’ Rights 1996 (Code of Rights), Right 4(2).
- 1.3 An observational study is not a “clinical trial”, for the purposes of the Injury Prevention, Rehabilitation, and Compensation Act 2001, section 32.
- 1.4 An observational study is not “human reproductive research”, for the purposes of the Human Assisted Reproductive Technology Act 2004 (the HART Act). The Guidelines nevertheless constitute “applicable ethical standards” for the purposes of the HART Act, section 27(4).
- 1.5 An observational study is not “medical or scientific experimentation” or “medical treatment” for the purposes of the New Zealand Bill of Rights Act 1990, sections 10 and 11.
- 1.6 The Guidelines are based on statements from New Zealand and international guidelines (see the Bibliography) substantially revised in the light of stakeholder comment. The Guidelines accord with key international guidelines including the Helsinki Declaration and the Council for International Organisations of Medical Sciences’ International Guidelines for Ethical Review of Epidemiological Studies.
- 1.7 The Guidelines are written primarily for investigators conducting observational studies. They are structured around the process an investigator undertakes when designing and conducting a study, from the consideration of the underlying ethical considerations to the communication of study results.
- 1.8 The Guidelines set out which observational studies require ethics committee review. In these Guidelines “ethics committee review” refers to review by a regional or multi-region health and disability ethics committee established under the New Zealand Public Health and Disability Act 2000, section 11. The Guidelines may also be relevant to ethics committee review in other settings. More detailed matters concerning such review are addressed elsewhere, including in the Minister of Health’s terms of reference for health and disability ethics committees and Ministry of Health’s Operational Standard for Ethics Committees. The Guidelines have precedence over the Operational Standard on any point of conflict; otherwise the Operational Standard applies to observational studies.
- 1.9 The Guidelines also include references to wider legislative provisions. It is the investigator’s responsibility to comply with all relevant legal requirements, including those set out in the Privacy Act 1993, the Code of Rights and the Health Information Privacy Code 1994 (HIPC). (A useful guide to the HIPC is Health Research and Privacy: Guidance Notes for Health Researchers and Ethics Committees (Health Research Council of New Zealand, 2002).)

- 1.10 The HIPC is issued under the Privacy Act 1993, section 46, is legally binding and has the status of a regulation. The HIPC specifies 12 information privacy rules in relation to health agencies and health information, so is applicable to observational studies. The HIPC is available at the Privacy Commissioner's website (www.privacy.org.nz).
- 1.11 The Code of Rights is a regulation issued under the Health and Disability Commissioner Act 1994, section 74. The Code of Rights sets out 10 rights applicable to all health and disability services consumers, including those involved in research. Investigators conducting observational research, audits and other related activities should be familiar with their responsibilities under the Code of Rights, and should consider their study in light of the rights of (proposed) participants. The Code of Rights is available at the Health and Disability Commissioner's website (www.hdc.org.nz). Specific rights from the Code of Rights are noted at relevant points in these Guidelines. (Note also that some provisions give legal effect to ethical standards. For example, the Code of Rights, Right 4(2), states, "Every consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards".)
- 1.12 If you wish to comment on your experience with using the Guidelines, please contact the National Ethics Advisory Committee at the address below. The Committee intends to review the Guidelines by the end of 2008, and would be grateful to have your comments to inform that process.

Email: neac@moh.govt.nz

Postal address: Observational Studies, National Ethics Advisory Committee Secretariat, PO Box 5013, Wellington.

2 Guidelines scope and definitions

- 2.1 This document is intended primarily to guide investigators conducting observational studies, including audits and related activities. The term “observational studies”, as used in these Guidelines, refers to epidemiological and clinical observational research and to audits and related activities. Audits and other activities are included because they share ethically relevant characteristics with observational research. These Guidelines apply primarily to observational studies in New Zealand settings.
- 2.2 In health research, observational studies are distinguished from intervention or experimental studies, as no intervention other than recording, classifying, counting and analysing of data takes place. (In intervention or experimental studies investigators deliberately alter some feature of people’s health or disability circumstances to study the effect of doing so. Examples of intervention research include randomised controlled trials.) In observational studies the investigator has no control over study variables and merely observes outcomes. These studies are distinct from observational studies in social science research, which may include the observation of participants during an intervention. Most observational research is epidemiological or health services research, but some observational studies, including most case series and case studies, are conducted by clinicians in personal care settings.

Types of observational research

- 2.3 The primary purpose or justification for observational research is to add to generalisable knowledge about a health or disability issue. The box below summarises the six main types of observational research.

Case control studies examine the relationship between an attribute and a disease by comparing those with and without the disease with respect to the presence of the attribute or level of exposure to it.

Cohort studies examine the relationship between exposure to a factor or factors and the probability of the occurrence of a disease by observing large numbers of people over a long period and comparing incidence rates of the disease in relation to exposure levels. A cohort study may be a clinical cohort study (for example, where a group of patients with a given disease is followed to examine the prognosis).

Cross-sectional studies examine the relationship between diseases (or other health-related characteristics) and other variables of interest in a defined population at one particular point in time, by collecting health and other information concerning members of the population. These include questionnaires or surveys done for research purposes.

Case reports are reports of cases from health or disability service or research settings.

Case series describe a set of cases of a disease (or similar problem). For example, a clinician may assemble a case series on a topic of interest, such as an unexpected adverse effect experienced by patients taking a particular medication.

Descriptive studies examine the existing distribution of variables in populations. For example, analyses of cancer registry data or emergency department data by person, place or time.

Types of audit or related activity

- 2.4 The primary purpose or justification for an audit or related activity is to improve delivery of the particular health or disability support service being studied or to control a threat to public health. (The results of audits and related activities should be disseminated at least to those able to take necessary action. Wider dissemination, including publication in scientific journals, may sometimes be appropriate.) The box below summarises the 10 main types of audit and related activities.

Audits involve the systematic evaluation of aspects of health or disability support service delivery by considering measurable indicators of performance and/or quality.

Programme evaluation is a type of audit where a whole programme is evaluated rather than specific interventions.

Evaluation studies aim to determine the relevance, effectiveness and impact of activities in the light of their objectives. Several types of evaluation are distinguished, including evaluation of the structure, process and outcome of an activity.

Quality assurance activities aim to improve health and disability support services by assessing the adequacy of existing practice against a standard.

Outcome analyses involve the assessment of health and disability support service quality by reviewing health care information to evaluate outcomes without comparing outcomes against a standard. For example, clinicians may retrospectively examine health care notes and perform descriptive analyses to determine the outcome of medical treatment or course of a particular illness.

Benchmarking aims to improve practice through the comparison of two or more health and disability support services.

Public health investigations explore possible risks to public health, are often of an immediate or urgent nature, and are often required by legislation. For example, investigations into outbreaks or clusters of disease, analyses of vaccine safety and effectiveness, and contact tracing for communicable conditions.

Public health surveillance involves the monitoring of risks to health by methods that include the systematic collection, analysis and dissemination of information about disease rates.

Pharmacovigilance (post-marketing surveillance) involves monitoring the adverse effects of pharmaceuticals after their introduction into the general population, by such methods as the spontaneous reporting of adverse events and the monitoring of all adverse events for a restricted group of medicines (prescription event monitoring).

Resource utilisation reviews evaluate the use of resources in a particular health or disability service activity. For example, by reviewing health records to determine health care inputs such as chest X-rays for patients with a particular diagnosis.

- 2.5 A small number of observational studies include activities, such as specimen collection, storage and use, and genetic testing, that are not addressed in these Guidelines. Investigators should refer to relevant international and national guidance regarding such activities. (For example, information on the collection and use of human materials can be found in Guidelines on Ethics in Health Research (Health Research Council of New Zealand, 2002). Note that all clinical research involving the manipulation of human genetic material must be approved by the Health Research Council’s Gene Technology Advisory Committee and a health and disability ethics committee (Health Research Council of New Zealand, 2002). See the Medicines Act (1981), section 30; the Crown Entities Act 2004, section 73(1)(c) and Schedule 1; and Health Research Council of New Zealand, (2002, p. 28).)
- 2.6 These Guidelines do not apply to observational research that uses only publicly available documents or data.
- 2.7 While these Guidelines may be useful for investigators conducting other forms of non-intervention study, such as qualitative and social science research, those studies use distinct methods that may raise separate ethical issues.

3 Ethics of observational studies

- 3.1 This section concerns the worth of observational studies and responsibilities for their ethical review, including their ethics committee review. For specific guidance on when ethics committee review is required, see section 11.

Worth of observational studies

- 3.2 The public is entitled to health and disability support services that are safe and effective. The public also has an interest in a safe environment. Observational studies play important roles in support of these public interests. For example, observational research might examine the relationship between exposures (such as chemicals in the environment or the use of medicines) and subsequent disease. For health services users, observational research can further the understanding and management of their disorder. Similarly, it is essential that any deficiency in health or disability support services is identified and acted upon, and audits and related activities can play key roles in this. Service providers should consequently inform the public that observational studies are essential for the high-quality delivery of health or disability services, and that their information may be used for such activities. They should also give consumers details of the measures taken to protect participants from harm.

Ethical review of observational studies

- 3.3 Investigators conducting observational studies are responsible for the ethics of these activities and for satisfactorily addressing the ethical issues these raise. This is the case whether or not ethics committee review is also required. When there is more than one investigator, the lead investigator has the overall responsibility for the ethics of the activity.
- 3.4 The greater the risk of harm from an observational study, the greater the care that is required in assessing the ethical issues raised.
- 3.5 All observational research, and some audits and related activities, requires ethics committee review. If an investigator is unsure whether ethics committee review of any particular study is required, he or she should seek an opinion on this from an ethics committee (see section 11). For minimal-risk observational research, and for audits or related activities that require ethics committee review, expedited review is appropriate (see 11.12–11.17).
- 3.6 Public health investigations, as defined above, do not require ethics committee review. This is because they are required for the protection of public health as central parts of public health practice, they are often of an immediate or urgent nature, and they are often required by legislation. Examples of such activities include investigations, undertaken by authorised people, into clusters of disease suspected to be caused by environmental agents and contact tracing. In these investigations, efforts are made to locate and treat people who have had close or intimate contact with a person with a known case of a communicable disease. People conducting public health investigations are nevertheless free to seek ethics committee advice about any special issues that might arise.
- 3.7 People conducting quality assurance activities should be familiar with the Health Practitioners Competence Assurance Act 2003 (HPCA), especially sections 54–63. When the Minister of Health has declared an activity to be a “protected quality assurance activity” the HPCA protects the confidentiality of information obtained in the course of the activity and gives the investigator immunity from civil liability. See also Protected Quality Assurance Activities under the Health Practitioners Competence Assurance Act 2003 (Ministry of Health, 2004).

4 Underlying ethical considerations

4.1 The following considerations are important to the ethics of observational studies. The application and weighting of these considerations will vary depending on the nature and particular circumstances of the observational study in question.

Respect for people

- 4.2 Respect for people, and for their rights, incorporates at least two fundamental principles.
- a) Autonomy, which requires that people who are capable of deliberation about their personal goals should be treated with respect for their capacity for self-determination.
 - b) The protection of people with impaired or diminished autonomy, which requires that people who are dependent or vulnerable be afforded security against harm.
(See also the Code of Rights, Right 1(1), “Every consumer has the right to be treated with respect”.)

Māori and ethical considerations

- 4.3 “The Government is committed to fulfilling the special relationship between iwi and the Crown under the Treaty of Waitangi” (Minister of Health and Associate Minister of Health, 2002, p. 2). This commitment should be respected by all investigators and, when applicable, should be reflected in the design and conduct of observational studies.
- 4.4 Issues relating to Māori cultural and ethical values should be addressed in discussion with Māori concerned. This may include appropriate whānau, hapū or iwi. “Comprehensive, high-quality Māori health research and information is necessary to inform the Government and to assist whānau, hapū and iwi to determine and provide for their own health priorities” (Minister of Health and Associate Minister of Health, 2002, p. 23).
- 4.5 There should be due recognition of Māori as the tāngata whenua and indigenous people of Aotearoa/New Zealand.

Justice

- 4.6 Justice requires that, within a population, there is a fair distribution of the benefits and burdens of participation in a study and, for any participant, a balance of burdens and benefits.
- 4.7 Accordingly, an investigator must:
- a) avoid imposing on particular groups an unfair burden of participation in research, audits or related activities; for example, vulnerable members of communities should not bear disproportionate burdens of studies from which other members of the community are intended to benefit; and
 - b) design studies so the inclusion and exclusion conditions for participants are fair; and
 - c) not discriminate in the selection and recruitment of participants by including or excluding them on the grounds of race, age, sex, disability, or religious or spiritual beliefs, except when such exclusion or inclusion is essential to the purpose of the study.

Beneficence and non-maleficence

- 4.8 The risks of the study should be reasonable in the light of the expected benefits.
- 4.9 Investigators should consider the features of a proposed study in the light of ethical considerations, and satisfactorily resolve ethical issues raised by the study. Not all ethical considerations weigh equally. A study may be assessed as ethically justifiable even if an usual ethical expectation, such as confidentiality of data, has not been comprehensively met, provided the potential benefits clearly outweigh the risks and the investigators can minimise the risks.
- 4.10 A proportionate approach should be taken: the greater the risk of harm from the study, the greater should be the care in addressing the ethical issues raised.
- 4.11 Above the threshold of minimal risk, the study warrants greater provision for the protection of participants. A study is within the range of minimal risk if potential participants can reasonably be expected to regard the probability and magnitude of possible harms from participation in the study as no greater than those encountered in those aspects of everyday life that relate to the study (for example, a clinical consultation with a health care provider).
- 4.12 The potential harms associated with observational studies are generally less than with experimental studies as no intrusive intervention takes place and participants are less likely to be in a dependant relationship with the investigator. Depending on the method used (whether previously collected information is used or new information is collected) potential harms in observational studies could include breaches of confidentiality.
- 4.13 Audits and related activities are typically minimal-risk activities. Compared with research, they typically have more predictable benefits and reduced risks. They provide benefits for people receiving health care or disability services, by being specifically directed at improving the delivery of that care or those services, or provide benefits to the public by addressing risks to public health. For this reason, in some settings it is unethical for health care or disability services, or a public health risk, not to be studied by an audit or related activity. (See also, the Code of Rights, Right 4(4), “Every consumer has the right to have services provided in a manner that minimises the potential harm to, and optimises the quality of life of, that consumer”.)
- 4.14 In general, when there is some engagement with affected communities during the conduct of the study, there is more likely to be long-term benefit to study participants and to the community.

Integrity

- 4.15 The investigator’s commitment to the advancement of knowledge implies a duty to conduct honest and thoughtful inquiry and rigorous analysis, and to be accountable for her or his activities.

Diversity

- 4.16 As they conduct observational studies, investigators should understand, respect and make due allowance for diversity among participants and their communities. (See also, the Code of Rights, Right 1(3), “Every consumer has the right to be provided with services that take into account the needs, values, and beliefs of different cultural, religious, social, and ethnic groups, including the needs, values, and beliefs of Māori”.)

Conflict of interest

- 4.17 The investigator should identify to other relevant people any perceived, potential or actual conflict of interest he or she might have in relation to any others who are involved with the study. Such conflicts of interest can compromise the design or conduct of a study or the reliability of its results, thereby exposing study participants or others to needless risk or inconvenience.
- 4.18 As appropriate to the circumstances, any conflict of interest should be minimised.

5 Design of study and protocol

Study question

- 5.1 Investigators should meet their obligations to communities by undertaking research that addresses important health problems.
- 5.2 In identifying and prioritising the health problems to be studied, investigators should take into account the perceived importance of the problem to the people living in a community after information about the problem has been provided to them. However, if investigators perceive that a health problem exists, but that the community is ignoring it or denying its existence, it may be appropriate to proceed with a study of the health problem while simultaneously working with the community to gain its confidence and support.
- 5.3 Investigators should ensure any audit and related activities they undertake have the potential to improve health outcomes.
- 5.4 The ethical principle of justice may be interpreted as requiring efforts to reduce inequalities. Decision making about the study question could include consideration of the potential to reduce health inequalities.

Study design

- 5.5 The study design must minimise risk of harm.
- 5.6 To the extent possible and whenever appropriate, investigators should involve community representatives in the planning and conduct of the study.

Scientifically sound

- 5.7 Scientific inadequacies in a study proposal have ethical implications. The scientific quality of a proposal should be such that the proposal's objectives can reasonably be expected to be achieved. For example, a questionnaire unlikely to achieve an adequate response rate will be scientifically inadequate. It is also important that studies that include Māori participants and aim to generate conclusions relevant to Māori have sufficient numbers of Māori participants to produce useful data and avoid imposing an unethical burden on Māori. Projects without scientific merit waste resources and needlessly use participants' donated time.
- 5.8 Every study proposal must be based on a thorough review of relevant current literature.

Skills and resources

- 5.9 The study must be conducted or supervised only by investigators with the necessary skills and resources to conduct the study and deal with any contingencies that may affect participants. Necessary skills may include competence in understanding different cultural understandings of knowledge and of how such understandings might impact on the analysis and results of a study.
- 5.10 People conducting audits or related activities must operate under professional standards or employment requirements that oblige them to maintain the confidentiality of patient data.

Protocol

- 5.11 All observational studies should be conducted according to written protocols that state the aims of the study, the data needed, and how the data will be collected, used, and protected. A principle of proportionality applies here: the amount of detail in the written protocol and the extent of protocol review processes should be related to the level of risk the study presents to participants.
- 5.12 When relevant, the protocol should include a statistical plan indicating the rationale for the number of participants involved.

6 Collection of health information

6.1 In relation to the collection of health information, investigators should provide to observational study participants any information that a reasonable person in their circumstances would expect to receive. This is so, whether or not their consent to participate in the study is required. The information required (if any) will depend on the design of the observational study in question. The Code of Rights, Right 6(1)(d), states:

Every consumer has the right to information that a reasonable consumer, in that consumer's circumstances, would expect to receive, including ... notification of any proposed participation in teaching or research, including whether the research requires and has received ethical approval.

(See also 3.2.)

6.2 Investigators should provide to study participants any information about who will have access to study data that a reasonable person in their circumstances would expect to receive. (See also, the Code of Rights, Right 6(3)(a), "Every consumer has the right to honest and accurate answers to questions relating to services, including questions about ... the identity and qualifications of the provider".)

6.3 See also the HIPC, Rule 3, and Privacy Act 1993, Principle 3.

Identifiability of health information

6.4 A key issue concerning health information is whether the individual concerned is "identifiable" from the information. The data used for observational studies can be identified, potentially identifiable, partially de-identified, de-identified or anonymous. These terms are defined in the box below.

Identified data: Data that allow a specific individual to be identified. Identifiers may include the individual's name, date of birth or address. In particularly small sets of data even information such as a postcode may be an identifier.

Potentially identifiable data (key-coded, re-identifiable): Key coding is the technique of separating personally identified data from substantive data, but maintaining a potential link by assigning an arbitrary code number to each data-identifier pair before splitting them. Held securely and separately, the key allows the re-associating of the substantive data with the identifiers, under specified conditions, if that is ever necessary (Lowrance, 2002). Data may be single-coded, or double-coded if extra security is required. Data can also be potentially identifiable if it is possible to infer an individual's identity from it.

Partially de-identified data (AIDS-type code): Data coded with abbreviated identifiers (for example, initials, date of birth, sex) are used for reporting AIDS, HIV and some other conditions. This allows re-identification by the clinician reporting, but is anonymous to the recipient, although duplicates can be linked.

De-identified data (not re-identifiable, anonymised, anonymous, unlinked): The process of de-identification can be irreversible if the identifiers have been removed permanently. These data are referred to as "de-identified" data. It should be recognised that the term "de-identified" is used frequently in other documents to refer to sets of data from which only names have been removed; such data may remain "potentially identifiable".

Anonymous data: Data that have been collected without personal identifiers and from which no personal identifier can be inferred.

Collection of health information directly from individuals

Approach

- 6.5 The investigator should choose a method of approaching participants that meets ethical and scientific standards.
- 6.6 Ethics committee approval is required for the use of health records (including disease registries) to identify and then approach individuals for research. In such instances the approach may be made directly or by the participant's doctor or relevant health practitioner. If the approach is not to be made through the participant's health practitioner, the reasons for this should be presented to the ethics committee. In such cases, either prior agreement from the participant's health practitioner should be sought to invite the individual to take part, or the participant's health practitioner should be informed that the individual will be invited to take part. In the latter circumstance, the individual should be informed of the name of the person who agreed to their being approached.

The reason for seeking the consent of the person's medical adviser for an individual to be invited to take part in research is not to usurp the individual's right to make the final decision about whether to take part, but to minimise the possibility of harm or distress to any individual. The medical adviser should be aware of the person's situation and be able to forbid a direct approach in the unusual situation that the person could be unduly distressed. Where there is uncertainty, the medical adviser should check with the individual that an approach is acceptable (Health Research Council of New Zealand, 2002, p 42).

- 6.7 When approaches to participants identified through health records involve visiting or telephoning them at their home, it is generally desirable that some advance notice be given (for example, through a letter).

Interviews

- 6.8 Interviewers should be properly trained and culturally sensitive, and should carry identification.

Free and informed consent

- 6.9 Investigators should obtain the prior informed consent of study participants (with certain exceptions, see 6.17–6.19, 6.25, 6.33–6.35, and especially 6.41–6.45). (See also, the Code of Rights, Right 7(1), "Services may be provided to a consumer only if that consumer makes an informed choice and gives informed consent, except where any enactment, or the common law, or any other provision of this code provides otherwise".)
- 6.10 Informed consent consists of two basic components.
- Adequate information is provided in a form and manner that enable it to be understood and an informed judgement made.
 - The consent is voluntary in nature (participation is free from manipulation, coercion, or any other undue influence).
- (See also, the Code of Rights, Right 2, "Every consumer has the right to be free from discrimination, coercion, harassment, and sexual, financial or other exploitation".)
- 6.11 Information about the purpose of the study should be as specific as possible without compromising the validity of the study.

- 6.12 (In many situations providing very specific information about the study in advance of seeking consent would prejudice the purposes of the collection by compromising the scientific validity of the study. For example, if a mother is to be interviewed to establish whether she has been exposed to a particular medicine that might have caused a congenital abnormality in her baby, it would be wrong, when asking her to consent to the study, to give her the name of the drug in question. If the name of the drug were disclosed, this may have at least one scientifically unacceptable consequence, in that the information collected may be biased. This is because if the mother in question had a baby with a birth defect, she would have both a reason and a longer period of time, in advance of the actual interview, to remember that she had been exposed to the drug. In contrast, a mother of a healthy baby would have less reason to remember past exposure, and would not reflect on possible past exposure during the period between the consent procedure and the actual interview. This effect could lead to a spurious association between birth defects and drug exposure in the mothers interviewed; thus if such an association were found, it could be scientifically invalid. In studies such as this, biased reporting can be minimised, and scientific validity assured, only by not disclosing in advance the complete details of the hypothesis under test (Health Research Council of New Zealand, 2002, p. 38).)
- 6.13 When specific information cannot be provided at the outset, the investigator should offer to provide results to participants. (See also, the Code of Rights, Right 6(3)(d), “Every consumer has the right to honest and accurate answers to questions relating to services, including questions about ... the results of research”.)
- 6.14 When investigators collect information directly from individuals, or seek their consent to access records, they should inform them that the supply of information is voluntary.
- 6.15 The right of any person to decline to take part in a study or to withdraw from the study at any time must always be explained and respected. This includes the right to decline to answer all or any questions in a questionnaire. (See also, the Code of Rights, Right 7(7), “Every consumer has the right to refuse services and to withdraw consent to services”.)
- 6.16 When the study involves people in dependent or unequal relationships, the investigator must ensure that their refusal to participate in, or decision to withdraw from, the study will not result in discrimination, a reduced level of care, or any other disadvantage.

People with diminished competence to give consent

- 6.17 Ethical consideration of studies involving individuals or groups who have diminished competence to give free and informed consent on their own behalf (for example, children) must seek to balance:
- a) the vulnerability that arises from their diminished competence; with
 - b) the injustice that would arise from their exclusion from the benefits of observational studies in these groups.
- (See also, the Code of Rights, Right 7(3), “Where a consumer has diminished competence, that consumer retains the right to make informed choices and give informed consent, to the extent appropriate to his or her level of competence”.)
- 6.18 Subject to applicable legal requirements, individuals who are not legally competent may be asked to become participants in observational research only when the study question can be addressed:
- a) with the participation of those individuals from identified group(s); and
 - b) when free and informed consent is sought from their legal representative(s) such as a welfare guardian or a representative with enduring power of attorney.
- (See also the Code of Rights, Right 7(4).)

- 6.19 When free and informed consent has been obtained from an authorised third party, and in those circumstances where the legally incompetent individual understands the nature and consequences of the study, the investigator must seek to ascertain the individual's wishes concerning his or her participation. The potential participant's dissent will preclude his or her participation.

Inducements

- 6.20 Investigators may seek to create legitimate motivation for participation in studies, but may not exert pressure by offering inappropriate inducements.
- 6.21 Risks involved in participation should be acceptable to participants even in the absence of inducement.
- 6.22 It is acceptable for investigators to repay the incurred expenses of participants (for example, travel costs).
- 6.23 A koha may be offered in line with the cultural norms of the study participants, but should not be of such a value that it could reasonably be interpreted as an inappropriate inducement or as a payment for participation. For this reason, it is often not appropriate to discuss koha before getting an agreement to participate. (Traditionally, koha is an acknowledgement of the knowledge and/or hospitality extended by tāngata whenua to manuhiri. Koha is presented as part of the pōwhiri onto a marae or other venue of the tāngata whenua. However, the definition of koha should not be restricted by reference to its traditional roots; contemporary meanings include the giving of koha in a different manner during research.)

Documentation

- 6.24 Evidence of free and informed consent by the participant or authorised third party should ordinarily be obtained in writing.
- 6.25 When written consent is culturally unacceptable or good reasons exist for not recording consent in writing (such as anonymous data collection or telephone interviews), the procedures used to seek free and informed consent should be documented.
- 6.26 Questionnaires are often innocuous and may even be offered by mail. Completion of the questionnaire can be taken as consent, provided the letter of invitation expressly leaves the participant free of obligation.
- 6.27 Some studies may involve interviews or questionnaires that are intrusive and may cause distress. For such interviews or questionnaires, it is appropriate to seek the participant's prior consent by forewarning him or her of the potentially distressing nature of participation.

Collective consent

- 6.28 For communities in which collective decision making is customary, communal leaders can express the collective will. However, the agreement or refusal of individuals to participate in a study has to be respected: a leader may express agreement or refusal on behalf of a community, but an individual's agreement or refusal of personal participation is binding. When an individual wishes to participate in a study that community leaders have objected to, individuals should be given information to this effect and the reasons why community leaders have declined to take part. Having considered this information, the individual then has the right to decide whether to participate.

Paragraphs 6.29–6.33 should be interpreted in the light of this paragraph.

- 6.29 Investigators who initiate a study within a whānau, a hapū or an iwi, when the investigators and participants are members of that same group, may prefer to provide, via a kaumatua or other person of authority in the group, a statement in the study proposal that group consent for participation was obtained from the representatives or participants in hui.
- 6.30 An individual's right to decline to participate in the study, expressed in hui, should also be noted. The statement of group consent obtained in hui should allow for study participants to withdraw at any time from the study if they so wish.
- 6.31 When the study is initiated from outside the whānau, hapū or iwi or when the investigators do not have a representative from that group within their number, the usual procedures for informed consent to participate in the study are expected. In addition, a system of accountability of the investigators to the whānau, hapū or iwi concerned should be instituted after full discussion with and agreement by the participants and investigators. The group's right to decline to have a study proceed within their whānau, hapū or iwi if the study is unacceptable to them is paramount.
- 6.32 Not all Māori have contact with whānau, hapū or iwi, and the usual requirements for fully informed consent to participate in a study proposal will be expected in such cases.
- 6.33 When it is not possible to request informed consent from every individual to be studied (for example, in a community study of the effects of water fluoridation), the agreement of a representative of a community or group may be sought, but the representative should be chosen according to the nature, traditions and political philosophy of the community or group. Approval given by a community representative should be consistent with general ethical principles. When investigators work with communities, they will consider communal rights and protection as they would individual rights and protection.

Collection of health information from a third party

Authorisation

- 6.34 When the investigator proposes to collect information from a third party, this should be with the authority of the individual concerned, except in specific circumstances.
- 6.35 If the investigator proposes to collect personal information from a relative or other third party without the authority of the individual concerned, because that individual is deceased, untraceable or incapacitated or for some other good reason, this approach should be justified to an ethics committee on ethical and scientific grounds.

Collection of health information from records

- 6.36 Access to medical or other records for purposes of observational studies should be restricted to appropriately qualified investigators and study associates responsible to them.
- 6.37 Investigators should be aware that access to health information is subject to the HIPC, and that access to personal information is subject to the Privacy Act 1993 and in some cases also to the Official Information Act 1982.
- 6.38 A named investigator to whom the records are disclosed should give a written undertaking to ensure the confidentiality of the records.
- 6.39 For records involving Māori health information, where a kaitiaki group has been established to act as guardian of information concerning Māori in the area of study, the kaitiaki group should be consulted. The purpose of kaitiaki groups is to give Māori control and protection of data concerning Māori and to ensure the data are used for

the benefit of Māori health and that the aggregated data is not used in a way that negatively affects Māori. See, for example, the Health (Cervical Screening (Kaitiaki)) Regulations 1995.

Consent

6.40 The consent of participants should generally be obtained for using identified or potentially identifiable data for research.

Collection of health information without consent

6.41 Access to identified or potentially identifiable data for research without the consent of the people the data identifies or makes potentially identifiable may be justifiable when:

a) the procedures required to obtain consent are likely to cause unnecessary anxiety for those whose consent would be sought;

or the requirement for consent would prejudice the scientific value of the study;

or it is impossible in practice to obtain consent due to the quantity or age of the records;

and

b) there would be no disadvantage to the participants or their relatives or to any collectivities involved;

and

c) the public interest in the study outweighs the public interest in privacy.

6.42 An example of when the procedures required to obtain consent were likely to cause unnecessary anxiety is a study of the use of an asthma drug as a possible cause of sudden deaths from asthma. This study compared the medical records of individuals who had died from asthma with the records of asthmatics who had been admitted to hospital but had not died. It would have been wrong to have sought the consent of the group who had not died, because informing these people of an untested hypothesis might have frightened and distressed them without good cause (Health Research Council of New Zealand, 2002, p. 37).

6.43 An investigator who proposes not to seek informed consent for use of identified or potentially identifiable data for research must explain to an ethics committee the reasons for not seeking consent and how the study would be ethical in the absence of consent.

6.44 The investigator must show how safeguards will be maintained to protect confidentiality and that the study has the goal of protecting or advancing health.

6.45 For audits and related activities it may be ethical to use health information without additional or specific consent as these activities are sometimes an essential part of high-quality health care delivery, so the activity may be one of the reasons why the data were collected.

7 Use of information

- 7.1 When identified or potentially identifiable data are used in a study, the information must not be used in a way that causes disadvantage to any participant.
- 7.2 If identified or potentially identifiable data are to be used for any study purposes, or by any people other than those specified in the approved protocol, investigators should develop a new protocol and re-apply for relevant approval.
- 7.3 See also the HIPC, Rule 10, and Privacy Act 1993, Principle 10.

8 Confidentiality of data

General considerations

- 8.1 Observational studies may involve collecting and storing personal information relating to individuals and groups, and such data, if disclosed to third parties, may cause harm or distress.
- 8.2 Investigators should make arrangements for protecting the confidentiality of such data by, for example, omitting information that might lead to the identification of individual participants, or limiting access to the data, or by other means.
- 8.3 Investigators are required to ensure the adequate physical and electronic security of data.
- 8.4 For studies involving the collection of information about illegal activities, for example, the use of illegal substances, potential participants should be made aware whether investigators can or cannot ensure confidentiality.
- 8.5 Identified or potentially identifiable personal data should not be used when the study could be done without personal identification (for example, by key coding or unlinking the data).
- 8.6 When personal identifiers remain on records used for a study, investigators should be able to justify this and ensure confidentiality will be protected.
- 8.7 In the unusual event that group confidentiality cannot be maintained or is violated, investigators should take all reasonable steps to maintain or restore a group's good name and status.
- 8.8 In the case of an audit or related activity, the activity should be conducted by people who are under a professional or an employment obligation to maintain patient confidentiality. Such activity may be initiated from outside the organisation or by the organisation itself, and may be conducted by the organisation (internal audit or related activity) or by a party external to it (external audit or related activity).
- 8.9 Note that "privacy" is the status of information about aspects of a person's life over which he or she claims control and may wish to exclude others from knowing. Privacy is a relative status and claims to it must be negotiated against countering claims such as the rights of others or collective societal goods. "Confidentiality" is the respectful handling of information disclosed within relationships of trust, especially as regards further disclosure (Lowrance, 2002).
- 8.10 See also HIPC, Rules 5 and 11, and Privacy Act 1993, Principles 5 and 11.

Record linkage

- 8.11 The investigator must justify to an ethics committee any observational study that involves linkage between records in which participants are identified or are potentially identifiable.
- 8.12 It may be justifiable to use personal information to enable record linkage without consent if:
 - a) the identity of participants is not disclosed except for the purposes of the record linkage and is not retained once record linkage has been completed; and
 - b) identifying information is used with sufficient security; and
 - c) the research has public benefit.
- 8.13 For audits and related activities, the use of record linkages without specific or additional consent is ethically justifiable when these activities are part of high-quality health care delivery.

9 When to reveal information obtained by observational studies

- 9.1 If it is reasonably foreseeable that health problems previously unknown to the individual will be identified during the study process, then arrangements for referral, with the individual's consent should be made. When findings suggest serious disease, study participants who have not given permission for the transfer of the information to their medical adviser should be urged to seek further advice. Care should be taken not to interfere with health professional–patient relationships. Investigators should usually refrain from giving an opinion about how a particular finding should be dealt with by a participant's doctor.
- 9.2 Individuals' privacy and confidentiality of information need to be ensured unless there is an overriding ethical concern (for example, health or safety) justifying the release of such information or if such release is required by law.
- 9.3 If privacy or confidentiality must be breached, the investigator should first make a reasonable attempt to inform participants of such required infringements.

10 Communication of study results

- 10.1 The potential benefits of observational studies are that participants and the community will be informed of general results that pertain to their health and that studies may provide objective results that policy makers can use to formulate sound public health policy.
- 10.2 Study protocols should include provision for communicating results in a timely, understandable and responsible manner, so that benefit to the community is maximised and is fairly distributed. The optimal time at which to disseminate the results of observational studies can be difficult to determine. Both the premature release and unnecessarily delayed release of study results can be more harmful than beneficial to individuals and society. It may be difficult to balance the need to communicate results to other scientists with appropriate peer review and the need to communicate results to other interested parties without undue delay.
- 10.3 Investigators have an ethical obligation to advocate the release of information that is in the public interest even when the data is retained by governmental or commercial sponsors.
- 10.4 Investigators should submit their methods and results to peer review (for example, review for publication). Peer review plays an important role in improving study protocols and scientific reports.
- 10.5 Study results and advice to communities should be publicised by whatever suitable means are available.
- 10.6 The publication of both positive and negative study results is important (for example, that no link was found between a particular study variable and disease) since it helps to prevent publication bias and allows for additional information to be gleaned through meta-analyses.
- 10.7 Investigators should strive to ensure that, at a minimum, study results are interpreted and reported on accurately.
- 10.8 Investigators should, when possible, anticipate and avoid misinterpretation of study results, as misinterpretation might cause harm.
- 10.9 Results of the study must not be published in a form that permits the identification of individual participants, and must be published in a form that gives due regard to cultural and other sensitivities.
- 10.10 Conflict may arise for investigators between doing no harm and openly disclosing scientific results. Harm may be mitigated by presenting data in such a way that the interests of those at risk are protected and scientific integrity is maintained.

11 When does an observational study require ethics committee review?

- 11.1 This section presents a decision path to determine whether an observational study requires ethics committee review.
- 11.2 An observational study is either observational research, or an audit or related activity. All observational studies require review by those who undertake them (see section 3).
- 11.3 All observational research requires ethics committee review, though it may be expedited review (see 11.12–11.17). Public health investigations, as defined in 2.4, do not require ethics committee review. Any other form of audit or related activity does not require ethics committee review, unless it reaches a threshold of more-than-minimal risk, as specified in 11.7. To determine whether an activity is observational research, a public health investigation, or any other form of audit or related activity, see section 2.

When does an audit or a related activity require ethics committee review?

- 11.4 Note that for the purposes of 11.4–11.17, the phrase “an audit or a related activity” excludes public health investigations.
- 11.5 Any audit or related activity that has one or more of the features identified in table one below has significant potential to cause harm. It is therefore a more-than-minimal risk activity. Such activity requires ethics committee review, unless there is an exception. The exceptions apply to situations where there is added protection for participants or another justification.
- 11.6 If uncertain of the need for ethics committee review, an investigator should consult the relevant ethics committee about the particular point or points on which they are uncertain.

Table 1: Audits and related activities requiring ethics committee review

11.7 Departure from normal care	
<p>Something withheld from or done to patients that deviates from normal health care, for the purpose of an audit or related activity, constitutes more-than-minimal risk (for example, when patients are allocated randomly to different types of normal clinical care or when extra blood samples or biopsies are taken). An intervention that is not undertaken for the purpose of normal care overlaps with research, so ethics committee review is required. For this purpose an “intervention” is a clinical intervention, and does not include extra questioning or the use of written questionnaires.</p>	
11.8 Use of stored samples	Exception
<p>Use of stored samples for study purposes other than those for which they were originally collected normally triggers a requirement for ethics committee review.</p>	<p>Ethics committee review is not required for study use of stored samples when health professionals are undertaking one or more of the following activities to assure or improve the quality of services:</p> <ul style="list-style-type: none"> a) a professionally recognised quality assurance programme (for example, pathologists re-reading specimens to check the accuracy of their own or a peer’s work); b) an external audit of services; or c) an external evaluation of services. <p>The justification for this is that the use is related to the primary purpose of the sample collection. See the Code of Rights, Right 7(10).</p>
11.9 Secondary use of data without consent	Exception
<p>Investigator use of data that were primarily collected for clinical care normally triggers a requirement for ethics committee review.</p>	<p>Ethics committee review is not required for secondary use of data for the purpose of quality assurance, outcome analysis or resource review when undertaken by those employed or contracted by the health or disability support service provider holding the information.</p> <p>The justification for this is that the use is related to the primary purpose of the data collection, and in such settings only individuals bound by a professional or an employment obligation to preserve confidentiality should have access to identified or potentially identifiable information.</p>

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<p>11.10 Extra data collected within a health or disability support service setting</p>	<p>Exception</p>
<p>Investigator collection of extra data (that is, data that are not already generated or monitored) normally triggers a requirement for ethics committee review.</p>	<p>Ethics committee review is not required for the collection of non-sensitive data, or an observation in which participants remain anonymous, when undertaken by those employed or contracted by the health or disability support service provider.</p>
<p>11.11 Extra data collected outside a health or disability support service setting</p>	<p>Exception</p>
<p>Investigator collection of extra data outside a health or disability support service setting normally triggers a requirement for ethics committee review. This feature will increase the potential for harm of an activity compared with data collection in a health care or disability support setting. The potential to cause harm to participants may increase further if someone who is not part of the clinical care team contacts participants; although externally conducted audits of health care and disability services are independent audits, so may be more valid.</p> <p>Note: This feature is not relevant when an individual is contacted as part of the normal operation of a health service (for example, checking the completeness of records), as this is not an audit or related activity.</p>	<p>Ethics committee review is not required for an innocuous questionnaire (for example, a patient satisfaction survey).</p> <p>Ethics committee review is not required for collection of information from a focus group discussion of care or service delivery.</p>

When is expedited review appropriate?

- 11.12 Expedited ethics committee review differs from full ethics committee review in two ways.
- a) A shortened form of application is used.
 - b) The review is not conducted by the full ethics committee, but instead by one or more of its members under delegation from it; and hence it may be conducted independently of the usual meeting schedule.
- 11.13 Expedited review is appropriate for minimal-risk observational research: case reports or case series; descriptive studies; and questionnaires or surveys for research purposes that do not involve the collection of sensitive personal information.
- 11.14 Expedited review is appropriate for an audit or related activity that requires ethics committee review.
- 11.15 Expedited review may be appropriate for an observational study that is undertaken as part of an educational qualification, and that requires timely ethics committee review. In this case, the ethics committee, or one or more members under delegation from it, should judge whether it is appropriate for the study to undergo expedited review. (Investigators should note that organisations that confer qualifications set their own requirements regarding ethics committee review of studies to be submitted for those qualifications.)

- 11.16 The reasons for allowing expedited review of observational research include that:
- a) it may use data already being collected or monitored;
 - b) it may be undertaken by investigators who have access in the normal provision of care to all identified study data, and have supervisory responsibility for staff who have access to any other study data;
 - c) subsequent publication of the research may pose a minimal risk of harm to any participants; and
 - d) the collection and subsequent use of information for the study may pose minimal risk of harm to participants.

Note that publication is “minimal risk” if no study participant is potentially identifiable from it, and no group faces more-than-minimal harm (for example, stigmatisation) from it.

- 11.17 The reason for allowing expedited review of an audit and related activity is that these are typically minimal-risk activities, which, compared with research, have more predictable benefits and reduced risks.

12 Additional points

- 12.1 Publication or an intention to publish does not make an activity research rather than an audit or related activity, does not make it a more-than-minimal risk activity, and does not trigger any requirement for ethics committee review. Any investigator who intends to publish results of any observational study that does not require ethics committee review should ensure the activity has been conducted in accordance with these Guidelines, and should inform the editor concerned that ethics committee review is not required. This is consistent with the guidance provided in the International Committee of Medical Journal Editors' Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication (2004, section 11.F):

When reporting experiments on human subjects, authors should indicate whether the procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000.

- 12.2 In general, an investigator who conducts an observational study that does not require ethics committee review need not inform an ethics committee of the conduct of that study. Organisations that employ investigators or sponsor observational studies might nevertheless specify their own additional processes concerning the notification or approval of studies.
- 12.3 When investigators have ethics committee approval for using a database or other source of health or disability information for the purpose of conducting observational studies, particular instances of such use may fall within the scope of the ethics committee approval, so do not require case-by-case ethics committee review. It may then be appropriate for the investigator to report to the ethics committee each instance of such use.
- 12.4 When ethics committee review of an observational study is required, a rule of "one study, one review" applies. Under this rule, each proposed study is to be reviewed by just one health and disability ethics committee. This will be either the relevant regional ethics committee or the Multi-region Ethics Committee. The question for this one ethics committee review to answer is: Has the investigator ensured that, if conducted at an appropriate locality, the study would meet established ethical standards?
- 12.5 For observational research that requires full ethics committee review, a locality assessment should also be conducted by each study locality organisation, or by an ethics committee if there is no study locality organisation. A "locality organisation" is an organisation through which study recruitment or conduct occurs. For example, for surveys in the community, for which there is no study locality organisation, approval from one ethics committee (the relevant regional ethics committee or the Multi-region Ethics Committee) is sufficient. More detailed guidance on the conduct of locality assessment is available at <http://www.newhealth.govt.nz/ethicscommittees/>. The question for the locality assessment to answer is: Has the investigator ensured that each study locality is appropriate? (This reflects the 2004 decisions of the Minister of Health, responding to recommendations from the National Ethics Advisory Committee, Review of the Current Processes for Ethical Review of Health and Disability Research in New Zealand (2003b).)
- 12.6 Investigators should inform the locality organisation of all low-risk observational research, and all audits and related activities that they conduct in or through it. The appropriate approach will vary from organisation to organisation; as such, organisations might also specify their own processes regarding notification or approval. For example, notification or approval might be through an audit register maintained by a quality assurance committee and/or through a related body.

13 Feedback on, and review of, Guidelines

- 13.1 If you wish to comment on your experience with using the Guidelines, please contact the National Ethics Advisory Committee at the following addresses:

Email: neac@moh.govt.nz

Postal address: Observational Studies, National Ethics Advisory Committee Secretariat, PO Box 5013, Wellington

- 13.2 The National Ethics Advisory Committee intends to review the Guidelines by the end of 2008. Your comments will inform this review process.

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Note: This bibliography is restricted to national and international guidance statements. A full bibliography of works consulted in the preparation of these Guidelines is available on the NEAC website (<http://www.newhealth.govt.nz/neac/>).

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