

The PASS Study

A Summary Fact Sheet

Prepared by the
Canadian Treatment Action Council



Version 2
March 30, 2006

About This Document

The **PASS Study: A Summary Fact Sheet** is a brief description of the Canadian Treatment Action Council's "PASS Study" – an investigation of post-approval drug safety monitoring.

Related Documents

A more detailed description of the PASS Study:

- **The PASS Study: A Community Report**
(CTAC fact sheet; March 2006)

Background: the current Canadian reporting system for adverse drug reactions:

- **How We Came To This PASS: the current post-approval surveillance system in Canada** (CTAC backgrounder; March 2006)
- **Improving our Health: the Need to Enhance the Post-Approval Surveillance System for HIV/AIDS Drugs in Canada**
(CTAC discussion paper; December 2000)

(All of the preceding documents are downloadable in PDF format from the CTAC website, www.ctac.ca, in English and in French.)

About CTAC

The **Canadian Treatment Action Council** (CTAC) is a national, non-governmental organization directed by people living with HIV/AIDS. CTAC informs public policy and promotes public awareness on treatment access and health care issues that impact people living with HIV/AIDS.

What is a Post-Approval Surveillance System?

Pharmaceutical drug treatments always involve a trade-off between efficacy (positive effects) and toxicity (negative effects). Before any drug can be approved for marketing, clinical trials must show that the trade-off appears worthwhile: i.e., the drug is effective, and safe enough. But serious or even life-threatening drug toxicities may not be recognized until after the medication is approved. *Post-approval surveillance* is the process of tracking adverse drug events (ADEs – suspected reactions to medications) after drugs have been approved for sale. The term *post-approval surveillance system*, or PASS, refers to the overall scheme that manages this monitoring process.

Before drug approval, detailed information on side effects, toxicities and adverse drug reactions (ADEs) is carefully collected during clinical trials. After approval, however, the data collection process becomes less thorough. In fact, estimates say that over half the drugs approved in Canada have serious side effects that were not detected until *after* approval.

Why is this? Essentially, the existing Canadian PASS is a fairly passive system, which only requires drug companies and health officials to make limited efforts to track “late-breaking” ADEs. Health Canada maintains a database of ADE information (through the Canadian Adverse Drug Reaction Monitoring Program, or CADRMP – a program of Health Canada’s Therapeutic Products Directorate.) People taking medications can report ADEs through their doctor; yet doctors are not obligated to pass on any information that patients report (although they may do so voluntarily). The system also demands a lot of time and paperwork that doctors can’t always meet.

In short, there is considerable room for improvement. Although Canada has a functioning post-approval surveillance system, nothing ensures that it is consistently used, and evidence suggests that the information it collects is neither timely nor complete.

CTAC and the PASS Study

The Canadian Treatment Action Council (CTAC) is a national organization dedicated to improving access to treatment and care for people living with HIV/AIDS. CTAC has identified community-driven post-approval drug surveillance as one of its goals, and chose to bring a community-based research approach to the issues of PASS.

In 1998, CTAC began a consultation including: CTAC Council members, community researchers, pharmacists, HIV primary care physicians, pharmaceutical industry representatives, and representatives of Health Canada’s drug regulation & monitoring programs. These collaborators agreed that CTAC would collaborate with professional researchers to carry out the “PASS Study”: a study of information collection methods for a post-approval surveillance system of anti-HIV drugs in Canada.

Study Objectives

The PASS Study was designed as a pilot (preliminary) study with the following goals:

- To pilot test four national methods of community-based data collection for antiretroviral side effects:
 - a toll-free 1-800 number,
 - face to face interviews,
 - mail/fax-in forms, and
 - culturally-specific focus groups.
- To compare the numbers of new reports of antiretroviral drug related events (over time, by location, and between data collection methods).
- To explore a ‘qualitative’ focus group method of collecting data (for specific ethnic/cultural groups – in this case, Aboriginal peoples).
- To report results to key stakeholders.

Although the PASS Study gathered a considerable amount of post-approval ADE information, its main focus was to assess the *methods* for collecting this data. In other words, this pilot study emphasized the “hows” of collecting ADE data, to ensure that the “whats” are collected in the best way possible.

Study Methods

To carry out the PASS Study, CTAC created an interdisciplinary Advisory Committee. In collaboration with the BC Centre for Excellence in HIV/AIDS, the pilot study was developed and carried out between November 2002 and June 2003.

Four separate community-based methods were used to gather information:

- A **bilingual toll-free phone line** that operated during nation-wide office hours (Jan 03 –Jun 03).
- A **mail/fax-in** option: *Data Collection Forms* were widely distributed to AIDS community agencies across Canada. Participants could pick these up, fill them out, and either mail them in postage-paid envelopes or fax them (toll-free) to the data collection site (Jan 03 – Jun 03).
- **Face-to-face/one-on-one interviews** at AIDS community agencies in Toronto, Vancouver, and Montreal (Nov 02 – Feb 03).
- Four **focus groups** with Aboriginal people in rural and urban areas of British Columbia, Alberta, Manitoba, and Ontario (Jan 03 – Mar 03)

A national promotional campaign encouraged participation – including newspaper ads, websites, and a flyer faxed to 180 organizations. The study began in November 2002, and data collection was completed in June 2003. The analysis and formal research report were completed in October 2004. A grand total of 1070 people with HIV/AIDS (PHAs) responded, plus 22 Aboriginal focus group participants.

Measures of success – numbers & demographics

A total of **1070** adverse drug reports were obtained through the PASS Study between November and July 2003.

One-on-one interviewers spoke to **933** people living with HIV/AIDS (PHAs) in three major urban centres (Vancouver, Toronto, and Montreal).

Telephone interviewers collected data from **40** individuals via the toll-free phone line.

Data Collection Forms were sent to 120 AIDS Service Organizations (ASOs) nation-wide (1510 in English and 245 in French). Of these, **97** were picked up, completed by PHAs and mailed or faxed to the study office.

Focus groups were conducted with a total of **22** aboriginal people in four provinces.

Response demographics were very close to the current demographics of HIV+ individuals on antiretrovirals – indicating that the study did well at capturing a representative sample of Canadian people on HIV medications.

Most of the respondents were male (n=894, 84%) and the largest number of total respondents identified themselves as men who have sex with men (n=698, 65%). A significant number of respondents were injection drug users (n=292, 27%). 369 respondents (35%) were non-Caucasians. A considerable number of respondents have had one or more adverse events (n=996) and 942 (88%) reported an adverse event to a health care professional.

Comparison - Reporting methods

All of the data collection methods succeeded in gathering data – but to varying degrees. The “easiest” option – mail and fax – were not well used: only 97 responses were collected. Of those, many were incomplete or poorly filled out – indicated that people would generally need help with the data collection form.

The toll-free line required a great deal of staff time and training, and yielded fewer responses than the mail/fax option – only 40 interviews were completed.

Personal interviews, despite the resources needed, resulted in by far the most, and the most useful, data. A total of 933 reports were gathered through one-on-one interviews.

Study outcomes – adverse drug reactions

By “walking through” data collection methods for adverse drug reactions, the PASS Study identified many important issues about how this kind of data is collected, and about PHA “lived experiences” with medications in general.

Typical ADE reporting by health professionals tries to focus, as narrowly as possible, on definable medical problems (e.g., vision problems, muscle spasms, osteoporosis, neuropathy, liver or kidney damage). However, drugs have other long-term impacts on quality of life that are very important to the people living with them. In the process of trying to identify and report ADEs, the PASS Study found what the researchers called “a detailed human portrait that might not be easily captured in the existing reporting system.” This included explorations of how PHAs manage medications and side effects – not just medically, but psychologically and socially.

There were many challenges in the actual reporting of ADEs. These included:

- Respondents’ ability to remember and identify ADEs: they may have happened some time ago, and there may have been more than one.
- The high number of various antiretroviral drug combinations, which makes it difficult to link specific drugs to specific ADEs.
- Separating out specific ADEs from overall “lived experience”; distinguishing between side effects, adverse events, and symptoms of illnesses.

These challenges showed that “the system” could learn significant lessons about large-scale community-based ADE reporting. Community-based reporting of ADEs proved to be generally consistent with existing information – therefore, it is likely to be a reasonable option for the future. However, a fundamental trade-off is involved: at one extreme, the narrower, purely “clinical” kind of reporting misses many of the long-term, social effects of living with medication - effects which are very important to the people living with them. On the other hand, the broader and more inclusive the reporting, the harder it is to sift out the conventional clinical information needed for medical reporting.

The PASS Study confirmed that what is important to the medical community, and what is important to PHAs, largely overlap but do not always coincide. Large-scale PASS systems will have to accommodate both needs, allowing for reporting the clinical information as accurately as possible, but also for reporting the social, emotional, and financial hardships, and difficulties with the health-care system, that result from living with HIV/AIDS and its associated medications.