Post-market Vigilance Activities
Why Post-market?

Arthur Brandwood
Postmarket Activities

- Recalls
- Adverse Event Reporting
- Audits (Site and Document)
- Sampling and Testing
- Track and Trace
- Safety Alerts

Sponsor Information & Training Day 2014
Overview

• The TGA’s Role
• Regulation of medical devices and the TGA’s Regulatory Authority
• The Reporting and Investigation of Medical Device Adverse Events
  - What is an adverse event?
  - When to report an adverse event
  - How to report
• Sponsor Obligations
• IRIS: Incident Report Investigation Scheme
  - Role, functions and responsibilities
  - What happens to an incident report?
  - Some statistics
• Post Market Monitoring/Review
• Vigilance Exchange
Role of the TGA in market vigilance and surveillance

The TGA’s role is to continually monitor and evaluate the safety and efficacy or performance of therapeutic goods that are available on the market and to manage any risks associated with individual products.

We regulate therapeutic goods throughout their lifecycle in a number of ways:

- Register
- Monitor
- Enforce compliance
- Changes to product information, safety alerts, recalls
- Assess evidence

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Regulation of Medical Devices

• Post market regulation of devices is monitoring to ensure the device continues to be “free from unacceptable risk”

• At all times the supplier and manufacturer must demonstrate continued compliance with “essential principles” that describe the safety and performance of a medical device

• Proof of compliance is demonstrated through a conformity assessment procedure
Device Safety Monitoring

Three major components of device safety monitoring:

- Ensuring that the manufacturer complies with the TGA’s required post-market surveillance system
- Post-market monitoring of compliance by the TGA
- Vigilance programs, such as incident reporting

The TGA monitors and regulates devices throughout their life cycle
The TGA has authority to...

- Ask questions of sponsors and manufacturers. There are penalties for providing false and misleading information
- Seize products and inspect premises
- Cancel/suspend products from supply
- Mandate a recall of a therapeutic product.

- Manufacturer/Sponsor is obliged to gather and report certain information
Medical Device Adverse Events

- What is an adverse event?
- When to report an adverse event
- How to report

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Medical Device Adverse Events

What is an adverse event/incident?

• An event that resulted in, or could have resulted in (had effective intervention not taken place) serious injury, illness or death to patient, healthcare worker or other person.

• A **medical device adverse event** is an event associated (caused or partially attributable) with the use (or misuse) of a medical device.
Serious injury (also known as serious deterioration in state of health) is:

- a life threatening illness or injury;
- a permanent impairment of a body function (The term “permanent” means irreversible impairment or damage to a body structure or function. The term excludes minor impairment or damage);
- permanent damage to a body structure; or
- a condition necessitating medical or surgical intervention to prevent permanent impairment of a body function or permanent damage to a body structure. *(In this context, medical intervention is not in itself a serious injury. It is the reason that motivated the medical intervention that should be used to assess whether an event should be reported)*
Medical Device Adverse Events

Difficulties and Malfunctions

- Problems with getting device to operate
- Repeated repairs
- Difficulty of use
- Difficulty of cleaning after use
- Many different faults that may affect the quality, timeliness and cost-effectiveness of health care. Events or other information in relation to the quality, performance and safety of medical devices (e.g. device design).
- The TGA encourages users to report issues of concern with the devices that they use. The TGA understands that under reporting both to the TGA and/or suppliers is an issue.
It is often difficult to determine whether an adverse event was caused by a medical device.

When in doubt it is better to report than not to report.
Sponsor – mandatory obligations

When to report

- Sponsors must report the details of events associated with their device(s) that have resulted, or could have resulted, in serious injury or death.
  - Guidance allows certain exemptions from reporting. Further information can be found in the guidance document Australian Regulatory Guidelines for Medical Devices (ARGMD).
  - Guidance stipulates the amount of information that constitutes a complete report.
  - These are conditions of inclusion set out in the Therapeutic Goods (Medical Devices) Regulations (2002).
- Within **two days** of becoming aware of an issue of serious public health threat or concern that will require prompt action to reduce the hazard
- Within **ten days** of becoming aware of a death or serious injury
- Within **thirty days** of becoming aware of an event that might have led to serious injury or death.

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Medical Device Adverse Events

How to report

- Log into eBS
- Select “Medical device adverse event reporting”
- List of all reports submitted by the sponsor
- Complete a new report, update follow-up or final report
- Device Incident Report reference number available immediately
- Save or print report

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Common Issues noted with reports submitted

- **Proof Reading** – check accuracy, be careful of cut and paste
- **Lack of Information or Relevancy** – ensure all the information is made available, accurate and relevant to the event as it makes assessment easier and reduces the need of further information being requested
- **Duplicates** – Ensure all parties in your company are aware of what has already been sent to the TGA.
  - The TGA makes every effort to match any user report it receives to a corresponding sponsor’s report.
  - If you have been sent a questionnaire for a user report and you have not reported it to the TGA - there is no need to do so separately.
- **Similar event rates**
  - Similar events are based on the clinical event description and not the cause of an event
  - The rate should preferably be provided in the form of an incidence rate or percentage.

Further information on how to fill in the report can be found in the FAQs on the TGA website

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IRIS - (Medical Device) Incident Report Investigation Scheme

“A scheme intended to help maintain the standard of devices used in health care through the voluntary cooperation between users government and industry through the investigation of adverse events and incidents”
Safety monitoring process

• Every adverse incident report entered into the database is reviewed by professional and medical staff

• Data is analysed to identify safety signals that may indicate a problem

• A signal is a preliminary indication of a safety issue and by itself does not indicate a causal association with the product

• When a signal is identified, a detailed evaluation is undertaken to establish if the product contributed to the root cause of the incidents reported
What happens to reports?

Initial risk assessment...

- All reports are entered into the Scheme’s database so that they may be easily referenced in the future.
- Urgent reports are addressed immediately by the Scheme coordinator.
- Focus is on unusual problems, potentially serious problems, or problems that have high levels of incidence.
- Isolated incidents or problems that are not likely to lead to injuries or have a detrimental effect on effectiveness are recorded but not necessarily further investigated.
What happens to reports? (cont.)

- Scientific, engineering and clinical experts assess the reports. They then determine what level of investigation will take place.
- The TGA investigator contacts the sponsor (company) and works with them to resolve any issues.
- Reports are treated as confidential and the reporter and sponsor are informed of the outcome of the investigation.
- Most reports are placed onto the Database of Adverse Event Notifications (DAEN). This is done after a final report is received & every three months.
Outcomes of investigations

If action is necessary it may involve any of the following:

- **Recall** - removal of goods from sale or use, or for correction.
- **Safety Alert** - urgent information to inform those using the device, or affected by the problem.
- **Report** in the TGA News, TGA website or other appropriate journal/s.
- **Product improvement**.
- **Referral to other TGA sections** for regulatory action.

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Source of Reports

Sponsor Reports:
- 2012: 1824
- 2013: 2456

Patient, Surgeon reports up (178, 310 respectively) in 2013 due to the PIP silicone breast implant issue

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Outcome of Investigations

Other Outcomes:
- Reviewed, trending purposes only
  - 2012: 1442
  - 2013: 1245
- Reviewed, No Further Action Required
  - 2012: 611
  - 2013: 1334

TGA publication was high in 2013 because of the 500+ reports received regarding the PIP issue.
Post Market Review Process

For safety and performance

• Conducted, although not exclusively, for the following criteria:
  − Trends from the Medical Device Incident Report Investigation Scheme
  − Recurrent breaches of the Advertising Code
  − Unresolved/repeated recalls
  − Information received from other regulatory agencies
• Reviews are conducted on one or all of the following criteria:
  − Sponsor
  − Manufacturer
  − Ingredient
  − Product
  − Kind of Device
• Reviews for safety and performance may be conducted at any point in the product’s life-cycle.
Post Market Review Process (cont.)

• The TGA usually requests that the sponsor provide the following information:
  - Labels
  - IFU
  - Advertising material
  - Technical documentation describing mechanism of action
  - Declaration of Conformity and certification of the manufacturing process and the product
  - Risk assessment
  - Ingredients and formulations of medicated/formulated devices
  - Post market data such as the number of problems, complaints, adverse events that have been reported. Details about what the sponsor and manufacturer has done about these issues.
  - Clinical evidence
• Dependant on the issue under review.
### Number of Reviews

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<th>No. Reviews completed</th>
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Sponsor Annual Reporting

In addition to the adverse event reports required under the vigilance provisions, it is a condition of inclusion that the sponsor of a medical device, that is:

• an AIMD;
• a Class III; or
• an implantable Class IIb

Provides three consecutive annual reports to the TGA following inclusion of the device on the ARTG (5.8 Regs):

• Annual reports are due on 1 October each year.
• Reports should be for the period 1 July to 30 June.
Vigilance Exchange

- TGA exchanges vigilance information through the National Competent Authority Reporting (NCAR) Program. Information will be exchanged on incidents and events where:
  - corrective action, including recalls, is to be taken;
  - there is a serious risk to the safety of patients or other users, but where no corrective action has yet been established although measures are under consideration, or where there is not yet a final report from the sponsor.

- The TGA will consult the sponsor when preparing a report. It is the responsibility of the sponsor to ensure that the manufacturer is aware of the TGA vigilance report, and that any comments that are made by the manufacturer are passed on to the TGA for consideration. The TGA will only consider changes that address inaccuracies in the report.
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Sponsor Information & Training Day

Tuesday 9 September 2014
Hyatt Hotel, Canberra
Practical Industry Compliance

By Minta Chen
Principle RAQA Associate
Bard Australia
Overview

• How can sponsors find out about adverse event?
• How to determine if an event is a TGA reportable adverse event?
• What happens after an event is captured?
• Annual reports of problems
• Examples of Adverse Events
How can sponsors find out about adverse event?
How can sponsors find out about adverse event?

- Post-Market Feedback Mechanism
- Capture post market data/feedback through product complaints, incidents, evaluation
- Sales, customer service, distributors to report events within 2 days of becoming aware
How to determine if the event is an adverse event?
How can sponsors determine if the event is an adverse event?

- Develop a Decision Tree and document decision:
  - Serious threat to public health 48 hours
  - Death or serious injury 10 days
  - Might have led to death or serious injury 30 days
  - 8 Exemption Rules

- If in doubt as to whether an event is a TGA reportable adverse event, always report:
  - Not reporting an adverse event has serious consequences for the company and you
  - It is always better to over report than under report
What happens after an event is captured?

INVESTIGATE THE SCOPE OF THE PROBLEM.

- Creative Disassembly of Parts
- Expert Investigation
- FMEA
What happens after an event is captured?

• Report the event to the manufacturer and event is investigated by the manufacturer
• Device History Records review - manufacturing records are reviewed
• Sample evaluation - if the device is returned, it undergoes product analysis to try to determine the root cause of the issue
• Trending - event is trended by product family
• Risk assessment - Occurrence rate is compared against accepted risk profile
  – Is the rate acceptable when weighed against the benefit of using the device?
  – If not: redesign of the device, change labeling, instructions for use, field action
• Root cause summary, Remedial Action / Corrective Action / Preventative Action
Annual reports of problems

• Class III, Class AIMD and implantable Class IIb medical devices
• Summary of all complaints received by the manufacturer over the year
• All adverse events reported to TGA including DIR number, incident rate
In Summary

• You need a complaint/incident handling procedure
• You need to define the processes for receiving complaints, reviewing complaints, evaluating complaints, reporting adverse events to TGA
• You need to document complaints, adverse events reports, investigations and outcomes, remedial and corrective actions
• Ensure regulatory obligations are well defined and documented with the manufacturer, through agreements, contracts etc
Examples of Adverse Events

- During set up of an infusion pump, the slide clamp punctured a hole in tubing creating a chemotherapy spill. No patient or staff was injured.
- Patient underwent emergency revision surgery of a hip joint implant due to elevated metal ion levels.
- Manufacturer provides insufficient details on cleaning methods for reusable surgical instruments used in brain surgery, despite obvious risk of transmission of CJD.
- When an attempt was being made to advance a guide wire, it was noted that the coating proximal end of the guide wire was stripped and peeling.
- Surgeon did not follow manufacturer’s instructions and over-inflated the balloon. Balloon burst inside patient intraoperatively leaving large plastic piece in the patient. This was then retrieved and removed by the surgeon.
Q&A Time

Thank You!