



FAQs for the Medication Safety Self Assessment[®] for Australian Hospitals

General Questions

What are the benefits of completing the assessment and submitting data online?

Aggregate results from a large pool of respondents will provide Australian hospitals with important information about the status of the medication use system that can set a new baseline for future years. Such data will be useful in advising hospitals about ongoing medication system improvements.

There is community concern about medication safety in Australian hospitals. Use of self assessment tools can help by demonstrating that hospitals are being proactive in identifying safe practices and are able to track aggregate progress over time.

Use of this tool will be of significant assistance to hospital managers and clinicians who seek to identify areas of weakness in their organisation related to medication use and lead improvements in these critical areas.

The tool will provide hospital administrators, Area Health Services, health departments, quality and safety organisations and standards organisations with the ability to identify common medication system weaknesses in Australian hospitals, identify new areas of focus, and offer practical system enhancements, including those that are thought to provide the highest leverage for overall error reduction. Organisations will be able to focus additional educational efforts and design useful programs to help hospitals implement high leverage strategies that can improve patient safety.

How many team meetings should we schedule and do we need senior administrative staff on our team?

On the basis of feedback from hospitals that participated in the Australian field test of the Medication Safety Self Assessment[®] for Australian Hospitals we suggest that you schedule three team meetings of at least two hours duration. Some participants completed the assessment in less time and some have needed more than two hours at scheduled meetings. It is important to have a senior administrator at these meetings because the assessment contains many items that challenge or inquire about your organisation's overall commitment to patient safety. Depending on the size of your organisation the attendance of the CEO may not be possible at all meetings, but a senior administrator for hospital operations should be in attendance for all meetings if possible.

What if a specific item doesn't apply to the services provided in my hospital?

A few items list **Not Applicable** as a choice if the item doesn't apply to services provided in your hospital. For example, if you don't provide **any** chemotherapy in your hospital, including oral agents, you can answer **Not Applicable** to those questions. There are also questions pertaining to outpatients which have a **Not Applicable** option available for hospitals that do not have an outpatient service. For some smaller hospitals there will be questions where there is no **Not Applicable** option available (e.g. provision of clinical pharmacy services). For these items hospitals that do not provide these services **should answer A or B**.

We are an Area Health Service with three hospitals that share many corporate functions (e.g. one Drug and Therapeutics Committee, Risk Management, Information Technology, shared policies and procedures). Should we complete just one assessment for all three hospitals?

It is important that each hospital in a multi-hospital system complete the assessment individually and submit their data separately. The items in the assessment ask questions well beyond governance and policies and procedures that are in place. Each hospital will truly benefit if they complete the assessment individually and obtain their own individual set of scores.

We are an ambulatory care service. Is the ISMP assessment valid for our organisation?

Many of the items contained in the assessment may not be applicable to your organisation but we would encourage you to organise an multidisciplinary team, review those items that are appropriate for your organisation and use the results internally.

How are individual items scored?

ISMP assigns a weight to each question for the purpose of calculating an absolute score for the self assessment of each item, core characteristic, key element and the self assessment as a whole. These scores can be used to compare performance on repeated self assessments over time, for aggregate comparisons across hospitals or for a specific group analysis.

Each item in the self assessment has a maximum score that ranges from 4 to 16 depending on the impact and long lasting effect of full implementation of each item on medication safety. Maximum scores for each question can only be achieved when items are fully implemented (score of E).

The scoring is not the same for all characteristics, as some identify situations representing a higher safety risk than others. Full implementation of some items provides a substantial reduction in risk so these items receive a higher potential score. ISMP bases decisions on how items should be weighted on data generated by the voluntary error-reporting program and the experience of ISMP staff in consultation with external expert groups.

Therefore, the self assessment items with the highest weight are those that:

- Target the system, not the workforce;
- Do not rely heavily upon human memory and vigilance;
- Demonstrate through scientific evidence that they are effective in reducing serious medication errors;
- Solve several medication-error related problems at the same time;
- Prevent errors with high-alert medications that have the greatest potential to cause patient harm;
- Simplify complex, error-prone processes;
- Safeguard high-risk patient populations; and
- Make it hard for healthcare practitioners to do their job incorrectly and easy for them to do it right.

An indication of how each weight is assigned follows:

Items that score a maximum of 16 often have a “forcing function” (see definition on following page) and/or a long lasting impact on safety. Examples include: computerised decision support systems that warn prescribers about unsafe orders (e.g. Adverse Drug Reactions (ADRs) including allergies, maximum doses, interactions); infusion pumps with smart pump technology; and items with demonstrated evidence that they are effective in reducing serious medication errors such as clinical pharmacy services.

Items that score a maximum of 12 have a slightly lower impact or long lasting effect on medication safety than items that score 16. Examples include: Bar-coding used at the point of care to verify drug selection prior to administration; use of unit-dose drug distribution systems; and independent double checks.

Items that score a maximum of 8 are of intermediate importance or impact. Examples include: use of preprinted forms to guide prescribing; use of prefilled syringes rather than vials or ampoules; and inability to enter orders into the pharmacy or CPOE system until a patient’s weight and allergies have been entered.

Items that score a maximum of 4 do not carry as much long lasting effect or impact as the other categories. They usually involve human tasks and include: storage systems; prescribing tasks; staff training; and education.

NOTE: Some of the self assessment items are weighted in a way that results in no numerical score (zero value) unless there is full implementation of the item throughout the organisation.

Scores may range this way:

A	B	C	D	E
0	1	2	3	4
0	2	4	6	8
0	3	6	9	12
0	1	8	12	16

Some questions may only provide a weight when the item is performed 100 % of the time:

A	B	C	D	E
0	0	0	0	4
0	0	0	0	8
0	0	0	0	12
0	0	0	0	16

Principles underpinning ISMP's weighted scoring system

Avoid reliance on memory

The Institute of Medicine 2000 Report *"To Err is Human: Building a Safer Health System"*¹ recommends that healthcare organisations use protocols and checklists wisely whenever appropriate. Rapid increases in knowledge and changing technology require that there is a process in place to ensure that protocols are regularly updated. Checklists should be constructed so that the usual state is answered as yes. Protocols for chemotherapy regimens and the use of heparin and insulin, for example, have been developed by many hospitals.

Other commonly used measures to reduce reliance on memory are the use of drug-drug interaction checking software and dosing cards (e.g. laminated cards that can be posted at nursing stations or carried in the pocket) that include standard order times, doses of antibiotics, formulas for calculating paediatric doses, and common chemotherapy protocols.

Constraints and Forcing Functions

Constraints and forcing functions are utilised to guide the user to the next appropriate action or decision and to structure critical tasks so that errors can't be made. They are important in designing defaults for devices and for processes such as diagnostic and therapeutic ordering. When a device fails, it should always default to the safest mode; for example an infusion pump should default to shutoff, rather than free flow.

Examples of the use of constraints or forcing functions in ordering medications are e-prescribing systems that will not allow an order to be entered unless allergy information and patient weight are entered first. Another forcing function is the use of special luer lock connections for syringes and indwelling lines that have to be matched before fluid can be infused. Removal of concentrated potassium chloride from ward or imprest stock is a forcing function. Removing the agent from the wards has a much greater potential to prevent errors when compared with educating staff about its safe use.

1. Institute of Medicine: *To err is human: Building a Safer Health System*. Washington, D.C.:National Academy Press, 1999.

Questions related to specific self assessment items and demographic information

Demographic Information

Are there guidelines available for the choices in this section?

Hospital administration should be contacted for the correct responses when completing the demographic questions. Answers to questions such as staffed inpatient beds, type of organisation, type of services provided, shared ownership with a healthcare system, and location should be consistent with the responses your organisation submits to government agencies and on accreditation surveys and applications.

Key Element 1: PATIENT INFORMATION

1.3 What type of laboratory tests does this question refer to?

This question refers to laboratory tests done within the hospital and/or tests carried out by external suppliers. Many hospitals have ambulatory areas and the laboratory tests done by the inpatient laboratory or outpatient supplier cannot be accessed. In scoring this question hospitals should consider accessibility to laboratory data from internal and external suppliers. The same applies for questions 1.4, 1.5 and 1.6.

1.8 What does “verified” ADR information mean?

If ADR information is entered into computer systems by non-registered personnel (e.g. admissions staff, unit secretary) a registered healthcare professional (nurse, pharmacist, or doctor) must verify the information from patient records, patient interview, etc. for accuracy and correct spelling. If applicable, a pharmacist must verify that the ADRs are correctly entered as the appropriate classification to allow correct computer screening.

1.11A and 1.11B How should I answer if the hospital has CPOE but only in some units?

If a dual system is in place ie., CPOE available but only in some areas, then hospitals should answer for CPOE 1.11B.

1.12 What is a Medication Administration Record (MAR)?

The Medication Administration Record provides a documentation of medication administration. In the USA and in many electronic medication management systems, the doctor's prescription is on a separate document or screen and the medications are transferred (either manually or electronically) onto a separate record of medication administration. Currently, in Australia when medications are prescribed manually, the medication chart combines the doctor's prescription and administration in the one document.

1.16 What does “available to the pharmacist at the time and place of decision making” mean?

The pharmacy system is either populated automatically with information about the patient's comorbid and/or chronic conditions or pharmacists can access this information without exiting the pharmacy dispensing system.

1.22 How do I answer this item if ADR information is transferred from prior admissions but practitioner verification is only needed for certain medications?

Your answer should not exceed a C for this item. The intent of this item is that if your system allows ADR information from a patient's prior admission to automatically populate a new patient profile, the information must first be verified before medication orders are processed. ISMP has received error reports when allergies from prior admissions populate the pharmacy computer system without further verification, and pharmacists dispense medications assuming that current ADRs have been entered.

Key Element 2: DRUG INFORMATION

2.12 and 2.13 Are there examples that you can provide for answering these items?

Examples of medication orders to perform testing on your computer system can be found below. These examples don't represent an exhaustive check of computer systems but can be used to identify categories (e.g. allergy checks, drug-drug interactions, maximum doses) of routine medication testing.

Sample Medication Orders for Computer Testing

(The following are examples only. If you do not have the medications in the sample test orders on your formulary then use other medication examples that may fit the category listed.)

Allergies and cross allergies	Timentin 3.1 grams IV every 4 hours (penicillin allergy) Bactrim DS one tablet orally twice a day (sulfonamide allergy) Brinzolamide (Azopt) instill one drop in affected eye three times a day (Sulfa allergy) Gastrografin (iodine allergy)
Herbal-Drug Interactions	St. John's wort; with Parnate 30 mg daily Chamomile; with warfarin 5 mg daily
Contraindications/dose limits based on patient diagnosis	Zocor 20 mg once daily; pregnant patient Sodium valproate 750 mg orally three times a day; patient with hepatic disease Neurontin 400 mg orally three times a day; patient on dialysis
Contraindications/dose limits based on laboratory studies	Gentamicin 350mg daily; serum creatinine 25mL/min Digoxin 0.25 mg orally once daily; serum potassium less than 3 mmol/ L
Contraindications/dose limits based on patient age/weight	Zyrtec 10 mg once daily; four-year-old patient Halcion 0.5 mg orally every night; seventy three year old patient MS Contin 30 mg orally every 12 hours; in a 10 year old patient weighing 40 kg Morphine 8 mg IV once; in an 18 month old weighing 9 kg Cisplatin 204 mg IV once; in a 12 year old patient
Single and cumulative dose limits	Atenolol 100 mg one tablet orally three times a day (maximum recommended dose 200mg/day) Carbamazepine (Tegretol) 1200mg three times a day (maximum recommended dose 1600 mg/day)
Dose limits for each component of combination products	Panadeine Forte 2 tablets every 4 hours (maximum recommended dose is 8 tablets per day)
Dose limits for combination and single products	Panadeine Forte one tablet every six hours; plus paracetamol 650 mg every 4 hours prn (maximum recommended paracetamol dose is 4 grams daily)
Therapeutic duplication with the same therapy (same drug)	Enalapril 10 mg daily; Renitec 10 mg daily Lopressor 50 mg one tablet twice a day; Betaloc 50 mg one tablet twice a day Adalat 10 mg three times a day; Adefin XL (nifedipine) 30 mg daily
Therapeutic duplication within a drug class	Pravachol 10 mg daily; Lipitor 10 mg daily
Therapeutic duplication with components of combination products	Enalapril 20 mg daily; Renitec Plus 20/6 one tablet daily
Contraindicated route of administration	Lantus insulin 20 units IV
Ability to build customised alerts (including look-alike/sound-alike medications)	Oxycontin and Oxynorm
Ability to build corollary orders into the system	Digoxin 0.25 mg once daily; alert that patient doesn't have a potassium level and/or serum creatinine ordered

2.16 Does this mean that anyone can screen medication orders in a computer system?

The intent of this item is that all new patient medication orders are entered and screened against the patient's total medication profile in an electronic system by a pharmacist before the medication is dispensed and administered unless it is an urgent lifesaving situation (e.g. cardiac arrest). In a hospital without 24-hour pharmacy service this process should be performed by a doctor or nurse when a pharmacist is not available.

2.19 What do you mean by a "formal process" of reconciliation?

"Medication reconciliation" is a three step process of verifying medication use, identifying variances, and rectifying medication errors at interfaces of care. Reconciliation is the formal process of double checking the medication history against medications ordered at the following points: a) at admission to hospital; b) at points of transfer within the hospital (e.g. between ICU and wards); and c) on discharge to home and/or another institution. These established formal checking processes can be confirmed by talking with for example, patients, caregivers, prescribers, outpatient pharmacies. Some variances are intended therapeutic changes, but other variances are unintended and can be considered medication errors. If these errors have clinical consequences - that is, if they cause harm or have the potential to cause harm - they can be considered actual or potential adverse drug events. The intent of this question is to gauge whether the hospital has an established, formal medication reconciliation process in place for all inpatients.

2.25 What is meant by the "potential for error is investigated?"

The potential for error in this item refers to a review of external publications (e.g. ISMP Medication Safety Alert!®, Therapeutic Goods Administration (TGA), Food and Drugs Administration and manufacturer notices) for information on reported errors. Feedback from hospital committee members on any personal experiences with the medication is also obtained and discussion about errors that may be prone to happen due to characteristics of the medication or drug category are reviewed before adding a drug to the formulary.

2.29 What is meant by "therapeutically necessary and appropriate"? We are fairly liberal with maintaining patients on the medications they are receiving before they enter the hospital to decrease any chance of adverse effects of switching medications for a short hospital stay. How would we answer this item?

In our experience the policy of maintaining patients on all medications "taken at home" can compromise the formulary system and add to possible errors due to the lack of proper professional staff education regarding prescribed medications which are not on the formulary.

Hospitals must have a strict policy on the use of non-formulary medications that would include prescribers stating the reason why a non-formulary medication is needed and a process to review the use of all non-formulary medication use. The Drug & Therapeutics Committee (DTC) should review non-formulary medication use and recommend additions and deletions to the formulary according to the medications most commonly prescribed in the outpatient setting as well as safety concerns with these medications. If your hospital has this strict control over non-formulary medication use then answers of C, D or E may be appropriate for this item.

2.30 What does "adequately monitor and manage" mean in this item?

Adequately monitor and manage refers to the ability of the healthcare organisation to provide necessary and current laboratory information, up-to-date drug alerts, and appropriate monitoring equipment in order for practitioners to adjust medication therapy, prevent adverse drug effects (including errors), from occurring or to help mitigate their adverse effects.

Key Element 3: COMMUNICATION OF DRUG ORDERS AND OTHER DRUG INFORMATION

3.1 We have Computer Prescribing Order Entry (CPOE) and all of our prescribers enter orders directly into the system. Do I answer E for this item?

Self assessment scores should not exceed level C (i.e. can not score D or E) if prescribers enter orders into a computer system that is **not** directly interfaced or integrated with the pharmacy computer system, even if all prescribers enter orders via computerised prescriber order entry.

3.2B What do you mean by "preprinted order forms"?

In high risk situations where hospitals do not have CPOE there is a case for having preprinted forms to guide the use of drugs in accordance with formulary decisions. These may be in the form of standing orders or flow charts. Seek advice about regulatory requirements from your State or Territory health department.

3.12 and 3.13 Explain what is meant by "uncommon uses and atypical doses".

Medications prescribed for indications or at doses that are not supported in the Approved Product Information or in the recent literature would be considered uncommon uses or atypical doses. A medication being prescribed for a non-TGA approved indication or recommended dose that is supported in peer-reviewed literature would not be considered an uncommon use.

Key Element 4: DRUG LABELLING, PACKAGING AND NOMENCLATURE

4.10 Is there a need for all drug containers taken to the bedside to be labelled?

Medication errors including patient deaths have occurred where unlabelled, incorrect fluids have been administered via IV and other routes. A quality assurance process should be in place to ensure proper labelling of all drug containers taken to the bedside. Care should be taken not to introduce new errors in this labelling process.

Key Element 5: DRUG STANDARDISATION, STORAGE AND DISTRIBUTION

5.5 What do you mean by “standard times”?

The National Inpatient Medication Chart (NIMC) provides guidance for recommended administration times. This does not preclude units identifying alternate times for particular patient groups. The important safety principle here is standardisation wherever possible.

5.6 Can you give an example of parameters for “dosing windows”?

One example of parameters for dosing windows would be administering the first dose of an antibiotic, which was ordered at 8 AM and scheduled for every 8 hours, at 8 AM and then scheduling the next dose for 2 PM if the hospital’s standardised schedule for every 8 hours is 6 AM, 2 PM, and 10 PM. If the order in this example was written at 12 noon then the first dose could be administered shortly after the order was received and the next dose would be scheduled to be given at 10 PM.

5.7A and 5.7B What is best practice with respect to sliding scale insulin?

The best practice is not to use sliding scale subcutaneous insulin but to manage unstable patients with intravenous insulin infusions. If it is used then it should be via a hospital-wide standardised protocol; ie. not every physician having their own. Hospitals in which physicians use their own protocols should score A or B.

5.10 What is the appropriate process for removing patient-specific medications?

Discontinued medications should be reviewed at least once daily when a pharmacist is available and should be removed from patient care areas as soon as possible. Any medications patients bring into the hospital remain their property and they must give approval for their removal by hospital staff. A process must be in place to ensure patient consent is obtained prior to their destruction. For discontinued medications that are started in hospital a process should also be in place to ensure their prompt removal.

5.16 When referring to IV solutions does this include solutions that contain medications (e.g. dopamine, heparin) plus solutions for paediatric use?

“IV solutions that are unavailable commercially” refers to all solutions that are NOT available commercially premixed. Medications such as heparin are available commercially as a premixed IV solution. Infusions containing amiodorone, oxytocin, as well as hydration solutions are included in this item.

5.18 What do you mean by “the least number of doses, concentrations and forms that will meet essential patient needs between replenishment”?

The intention of this question is to ensure that nurses have access to an optimal range of products for patient care in each specific patient care area. On the one hand selection errors can occur if there are multiple forms and strengths available. On the other hand calculation and manipulation errors can occur where the exact dose is not available. Careful consultation needs to occur between nursing and pharmacy staff to ensure an appropriate range of products is available.

5.19 Where can I find more information about UNIT-DOSE forms?

For more information about UNIT DOSE forms please refer to the Society of Hospitals Pharmacists of Australia *Standards of Practice for the Distribution of Medicines in Australian Hospitals*. June 2006, J Pharm Pract Res 2006; 36(2): 143-9).

5.25 What if my hospital has a policy not covered by options 5.25A, 5.25B or 5.25C ?

The main safety principle here is that non pharmacy personnel should be prohibited from entering the pharmacy. If your hospital policy permits non pharmacy personnel to enter the pharmacy then you should choose Option 5.25C and score A or B.

5.38 What if the manufacturer does not have an expiry date and I repackage the chemical?

If the expiry date is not available from the manufacturer and pharmacy has repackaged the product then an expiration date, according to an established internal policy, should be listed on the container.

Key Element 6: MEDICATION DEVICE ACQUISITION, USE AND MONITORING

6.10 What do you mean by an administration set that has “integrated free-flow protection”?

The administration set should not be capable of free flow of intravenous fluids in any of the following situations:

- when the set is installed in the pump and the pump is not operational
- when the set has been removed from the pump
- when the set is incorrectly installed in the pump
- when the pump door is opened.

A roller clamp is not the same as an administration set with integrated free-flow protection.

6.12 Does this item infer that all practitioners (nurses, pharmacists, etc.) including agency staff must be educated about medication delivery devices as well as automated equipment used in the pharmacy?

The intent of this item is that practitioners who are required to use the specific equipment are properly educated on its use and competency testing is performed. For example, nurses are competent with the use of monitoring equipment used on their unit, pharmacists are competent with automated compounding equipment used in the pharmacy, and both pharmacists and nurses are competent with the use of automated dispensing cabinets.

Key Element 7: ENVIRONMENTAL FACTORS, WORKFLOW AND STAFFING PATTERNS

7.4 Does this refer to IV preparation in the ward or the pharmacy?

The principle of minimising distractions applies equally in the pharmacy and ward areas. Any staff involved in the preparation of IV solutions should have minimal distractions to lessen the risk of errors.

7.9, 7.10 and 7.11 Our medical staff are routinely required to work long shifts. How should I score this question?

Currently there are no national standards or benchmarks for the maximum length of a safe shift or the break required between episodes of work. Some State awards do specify appropriate shift lengths but there are differences between the various practitioners and across States.

The Australian Medical Association (AMA) has undertaken a significant amount of research in this area and has developed a *National Code of Practice – Hours of Work, Shiftwork and Rostering for Hospital Doctors*. This identified that the level of fatigue and the consequent effect on performance are not purely related to the length of shifts but are the product of a range of factors, e.g. number of long and/or

night shifts worked per week, minimum periods of rest provided, shift rotations etc. Nevertheless it is generally agreed that hospitals should minimise the number of long shifts (10 or more hours) that practitioners are required to work in a given week.

The Code now stands as the accepted standard for safe working hours for hospital doctors in Australia. It contains a Risk Assessment Guide and a Risk Assessment Checklist to help assess the risk level of an individual's working hours. Currently there are no similar codes available for hospital pharmacists and nurses but we would suggest using the AMA National Code of Practice as a guide for these other practitioners. Please contact the AMA for more information or to obtain a copy of the code.

7.15 Explain the term “minimised” in this item.

The overuse of rotating agency personnel has often been associated with errors. This is usually due to the lack of time for a complete orientation (including competency testing), to the entire hospital. ISMP recommends that the use of agency personnel, unless in special circumstances (e.g. worker strike, severe recruiting difficulties), be kept to less than 5 % of the total employee pool for each discipline.

Key Element 8: STAFF COMPETENCY AND EDUCATION

8.1 Should agency nursing staff be evaluated for competency before starting in a new facility?

ISMP recommends that agency nursing staff should be evaluated for basic competencies before they begin working on their own. This may include ensuring they can operate the infusion pumps used in the hospital and other equipment, that they know how to administer IV medications, use medication charts etc. ISMP also recommends that agency contracts should state that the agency can verify competencies.

8.2 What type of competency evaluation is recommended for new pharmacy staff?

ISMP recommends that hospitals have a competency evaluation that is linked to the hospital orientation process. The competency assessment would include preparation of IVs, reviewing orders, performing dose adjustments for certain drugs, working any equipment in the pharmacy or on patient units that a pharmacist should be familiar with, performing an independent double check, chart documentation, performing calculations, etc. ISMP also recommends setting up simulated errors for the staff to identify. This is not a pass/fail test but more of a learning exercise. In fact the majority of this would be to evaluate if additional training is needed rather than waiting for an error to happen and then providing additional training.

8.11 What type of training is suggested?

At this time appropriate levels of training are not agreed at either a state or federal level. Examples of appropriate training could also include training on prescription writing for doctors and training in the use of electronic resources e.g. eMIMs (all practitioners). Paediatric facilities should include training in the following areas: weight documentation; Body Surface Area (BSA) calculation; dose calculation; calculation of drug displacement for IV solutions; and off-label drug use.

8.12 What are some examples of accountability standards for patient medication safety?

Some examples of items that could be included are: a willingness to speak up about safety issues, focus on change practices to enhance safety, ask for help when needed, enhance teamwork, review of safety literature. These standards should be supported by senior management and human resources staff and should NOT focus on individual practitioner and/or unit error rates.

Key Element 9: PATIENT EDUCATION

No frequently asked questions in this section.

Key Element 10: QUALITY PROCESSES AND RISK MANAGEMENT**10.6 What is meant by “error rate” in this item?**

Many organisations attempt to use the number of voluntary reported errors as a numerator to calculate a medication error rate using a denominator (such as total doses dispensed) to compare the “rate” of errors in their organisation and for unit specific rates of comparison. These calculations should not be used for internal or external comparison. Some organisations may use a determination of error frequency based on the number of errors detected using valid scientific methodologies such as direct observation (numerator), divided by a volume indicator such as the total number of medication doses that should have been administered, total patient admissions, or number of associated procedures (denominator). Even if these methods are employed they should not be used to compare practitioners or units within the hospital.

10.10 and 10.11 What is meant by the governing body’s “commitment to patient safety” and the “hospital’s strategic plans”?

These items relate to the atmosphere (culture) that exists within your organisation. Everyone, including the governing body, must believe and exhibit that patient safety and a non-punitive system based approach to medication error prevention is important. Organisations with open error reporting policies, which are non-punitive and that use results of error analysis to institute system changes that may involve capital investment are, in the ISMP experience, ahead of the curve in safe medication use practices. Answers to these items

must be honestly agreed upon between the senior administrator(s) on your assessment team as well as all other members.

10.22 How should “near misses” and potential errors be analysed?

We recommend extracting data from your incident reporting system in an aggregate way to review higher volume but less serious errors. These can be analysed at a unit and/or facility level.

10.23 We have a multidisciplinary team that shares error experiences but we do not routinely convene in person. Could we answer E to this item?

In our experience organisations that have set a routine time to meet to share and analyse external and internal errors are more successful than those organisations that seldom meet or only meet when a sentinel event occurs. If you do not have routine face-to-face meetings your answer should be C or D.

10.29 Explain the examples given for “an effective means of measuring medication safety”.

These are methods often used by hospitals as a more accurate measurement to track risk reduction strategies. They may include:

Observational methods of error detection - A determination of error frequency based on the number of errors detected during direct observation of performance. This measurement is used to obtain a numerator, which is then divided by a volume indicator such as the total number of medication doses that should have been administered, total patient admissions, or number of associated procedures, which becomes the denominator.

Tracking risk priority numbers from FMEA- A process of assigning a risk assessment number to a specific FMEA for a process, incorporating change strategies into the process, and re-performing the FMEA to determine if the risk assessment number has changed; and

Triggers- A list of laboratory values, medications, procedures, and other measures (e.g. INRs or aPTTs above a critical value, one time dose of an antidote, emergency returns to operating theatre) that may indicate an error has occurred. These may be tracked electronically during order entry or manually via electronic printouts and chart review.

10.31 Explain what is meant by “published” in this item?

The term published refers to a mg/kg dose that is either included in the Approved Product Information for the drug, published in standard reference texts, or available in peer reviewed journal articles.

10.37 and 10.38 Can a nurse, rather than a pharmacist, perform the independent double check on chemotherapy and paediatric/neonatal IV admixtures before dispensing the products?

Only if the nurse verifies the actual drugs added to the solutions (i.e. observes the vials and volume/dose of medications which were added). Such an occurrence may happen in satellite pharmacies, which are within oncology/paediatric units when only one pharmacist is available or in the central pharmacy if there is only one pharmacist and no support staff available. Verification would require the nurse to physically view the containers of medications, either by going to the pharmacy or the pharmacist would bring the containers to the patient unit.

10.47 What are the relevant standards applicable to IV admixture in Australia?

Practice Guidelines for Aseptic Dispensing Services May 1996, Aust J Hosp Pharm 1994; 24(6):509-12

Standards of Practice for the Safe Handling of Cytotoxic Drugs in Pharmacy Departments August 2004, J Pharm Pract Res 2005; 35(1): 44-52

Standards of Practice for the Transportation of Cytotoxic Drugs from Pharmacy Departments March 1999, Aust J Hosp Pharm 2000; 30 (3):116-117

Guidelines for the Design and Presentation of Drug Dosage Forms May 1996, Aust J Hosp Pharm 1992; 22 (4): 323-7

Standard for the Preparation of Pharmaceuticals in Australian Hospital Pharmacy Departments National Coordinating Committee on Therapeutic Goods September 1993. Aust J Hosp Pharm 1994; 24(2): 182-88.