1. Purpose

This Procedure outlines the process for the utilisation of Intranasal Fentanyl as an analgesic in Paediatric Clinical areas throughout the West Coast District Health Board (WCDHB).

2. Application

This Procedure is to be followed by all clinical staff throughout the WCDHB.

3. Definitions

For the purposes of this Procedure:

- **Prescribing** medications is the responsibility of the Doctor;
- **Dispensing** medications is the role of the Pharmacist;
- **Administration** of medications is undertaken by nurses.

4. Responsibilities

For the purpose of this Procedure the:

- **The Chief Medical Officer/Director of Nursing** is required to:
  - oversee all aspects of this Procedure
  - monitor the performance of WCDHB staff members in relation to this Procedure;

- **Clinical Staff Members** are required to:
  - ensure they abide by the requirements of this Procedure

5. Resources Required

This Procedure requires:

- Use IV preparation – 100mcg/2ml.
- Use a 1mL tuberculin syringe
- A Mucosal Atomizer Device (MAD)

6. Process

1.00 Introduction

1.01 Morphine and Fentanyl are usually given via the intravenous route with the additional discomfort and pain of insertion of an IV cannula. Intranasal Fentanyl has the potential to eliminate this disadvantage and provide significant reduction in pain scores by 5 minutes.1 It has a duration of action of at least 30 Minutes. The intranasal delivery of Fentanyl provides rapid absorption (therapeutic levels within 2 minutes) and excellent bioavailability (at least 50%).

2.00 Technique

2.01 The patient should be reclining at 45 degrees and the syringe should be held horizontal and the contents expelled as a mist into the nares in one rapid dose.

2.02 Doses of 1 mL (50 micrograms) or more should be divided between nares. 
(The volume to be administered limits use of Intranasal Fentanyl to children under 70kg)
3.00 **Dose**

3.01 1.5 micrograms/kg (minimum dose of 20 micrograms, maximum dose of 100 micrograms)

3.02 A second dose of 0.5 micrograms/kg can be given after 10 minutes if significant pain persists.

4.00 **Indications**

4.01 Children older than 2 years with moderate to severe pain e.g. burns, suspected fractures.

4.02 Particularly useful to allow topical anaesthetic application prior to IV insertion or in situations where IV access is not likely to be required e.g. burns, dressing changes, foreign body removal, POP application.

5.00 **Contraindications**

5.01 Age less than 2 years (limited data on safety or efficacy in this age group)

5.02 Head trauma, chest trauma, abdominal trauma and hypovolaemia

6.00 **Possible Adverse Effects**

6.01 Uncommon – Nausea, vomiting, sedation (Prophylactic antiemetic use is not required in paediatrics)

6.02 Rare (not described with Intranasal use) – respiratory depression, muscle rigidity (including chest wall)

7.00 **Monitoring and Recovery**

7.01 Observe for 20 minutes post dose.

7.02 Suitable for discharge one hour post dose if responding appropriately.

7.03 Provide caregiver with information regarding transport and observation at home.

7. **Precautions And Considerations**

- Condition or injury requiring immediate IV access
- URTI or other cause of blocked nose - may cause unreliable delivery of drug.
- Prior dosing with narcotic may produce drug accumulation
- Co-administered sedatives and co-morbid medical conditions may require a modified dose
- When prescribing Intranasal Fentanyl write the word “Intranasal” and not “IN” – this is to prevent confusion with “IV” and “IM”

8. **References**
Intranasal Fentanyl Procedure

- Starship Hospital Intranasal Fentanyl Guidelines

9. Related Documents

WCDHB Administration of Medications Procedure
WCDHB Controlled Drugs Procedure
WCDHB Emergency Orders and Verbal Orders Procedure
WCDHB Medication Errors Procedure
WCDHB Medication Policy
WCDHB Refusal of Medications by Patients Procedures

<table>
<thead>
<tr>
<th>Revision History</th>
<th>Version:</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed By:</td>
<td>Clinical Nurse Educator/Pharmacy HOD</td>
<td></td>
</tr>
<tr>
<td>Authorised By:</td>
<td>CQIT</td>
<td></td>
</tr>
<tr>
<td>Date Authorised:</td>
<td>May 2012</td>
<td></td>
</tr>
<tr>
<td>Date Last Reviewed:</td>
<td>May 2012</td>
<td></td>
</tr>
<tr>
<td>Date Of Next Review:</td>
<td>May 2014</td>
<td></td>
</tr>
</tbody>
</table>