Opioids—Changing Routes of Administration

There is variation in practice when converting an opioid from one route of administration to another. The chart outlined below reflects the practice at Our Lady's Hospice and Care Services (OLH&CS). **THE INFORMATION OUTLINED BELOW IS INTENDED AS A GUIDE ONLY**. Other factors may need to be taken into consideration when converting from one route of administration to another including the clinical condition of the patient and patient safety measures. The patient should be monitored very carefully during the route conversion period. Please consider the need for breakthrough pain medication during the route conversion period. **ALL RECOMMENDATIONS OUTLINED BELOW ARE SUBJECT TO CHANGE DEPENDING ON THE CLINICAL CONDITION OF THE PATIENT.** Please note that the recommendations below are based primarily on the experience of morphine, oxycodone and hydromorphone administered via continuous subcutaneous infusions (CSCI). Caution is advised when applying these recommendations to the use of methadone or short acting opioids.

Converting To → / Converting From ↓	**Oral – sustained release opioid** (includes MST® tablets/suspension, OxyContin® and Palladone® SR)	**Fentanyl or Buprenorphine transdermal patch***	**Opioid CSCI**
Oral – sustained release opioid (includes MST® tablets/suspension, OxyContin® and Palladone® SR)		Administer the last dose of the sustained release opioid and apply the transdermal **fentanyl or buprenorphine** patch at the same time.	The CSCI should be started about 4 hours before the next oral dose is due in order to maintain analgesia.
Fentanyl or Buprenorphine transdermal patch	The clinical condition of the patient should be taken into consideration when carrying out this type of switch over. Remove the transdermal fentanyl patch and administer the sustained release opioid after 8—12 hours. See note below for buprenorphine.		**Option 1:** Leave the fentanyl/buprenorphine transdermal patch in place and supplemental opioid should be administered through the CSCI. **Option 2:** Remove the fentanyl transdermal patch and commence the CSCI 12 hours later. Monitor for worsening of pain for up to 24 hours. See note below for buprenorphine.
Opioid CSCI	Stop the CSCI as soon as the sustained release oral opioid is administered.	The CSCI should be stopped 12 hours after the transdermal **fentanyl or buprenorphine** patch has been applied.	

Buprenorphine: A reservoir of buprenorphine accumulates in the body, particularly in adipose tissue, and significant plasma levels persist for at least 24 hours after discontinuing transdermal buprenorphine. If the patient receives an oral sustained release opioid or a CSCI is commenced 12 hours after the transdermal patch is removed, it would be prudent to monitor the patient carefully over the following 12 hour period.

* the patient should use p.r.n. doses liberally in the first 24 hours after rotation to a transdermal patch, as it takes a number of days for drug concentrations to reach steady state in the case of both TD buprenorphine (up to 9 days) and TD fentanyl (up to 2 days).

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