

Coding and VAED reporting of continuous ventilatory support

Introduction

This article aims to clarify for Victorian coders the current DH rules for reporting of continuous ventilatory support and code assignment according to standards and conventions.

Coding of continuous ventilatory support (CVS)

1. Intubation codes are only assigned when intubation occurs without ventilation – all patients
2. No codes are assigned for the tube or mask that is used to deliver the ventilatory support
3. There is no differentiation of coding rules based on age
4. Surgical Patients

The ventilatory support that is provided to a patient during surgery is associated with anaesthesia and is considered an integral part of the surgical procedure. Therefore, the following points apply for calculation of the duration of ventilatory support for these patients:

- A. Ventilatory support initiated in ED or ward, continuing through surgery. These patients are assigned a code based on total hours since intubation.
- B. Ventilatory support initiated in theatre: These patients must have >24 hours of support post surgery before a code can be assigned. Once >24 hours have been provided post surgery the duration is counted from the time of intubation.
- C. Ventilatory support initiated in theatre for multiple visits to theatre with extubation between visits: For each visit to theatre the patient must have >24 hours of support post surgery before those hours can be counted for coding. If this criterion is met the hours are calculated from the time of intubation. CVS hours for all visits to theatre that meet this criterion are then added together to calculate the cumulative hours for coding.
- D. Ventilatory support initiated in theatre for multiple visits to theatre without extubation between visits: The CVS that is continuous since the original surgery is considered to be continuous ventilation for respiratory support rather than for anaesthesia (patients would preferably be extubated before returning to theatre). The patient must receive >24 hours post original surgery before the hours can be coded. The calculation of duration then starts with the intubation for the original surgery and continues through all the subsequent visits to theatre.

5. Non Surgical Patients

As CVS is not initiated for anaesthesia but for respiratory support, all hours of CVS are used for code assignment.

Reporting CVS hours to VAED

Instructions relating these data items can be found in the VAED Manual, Section 3. Please refer to the HDSS website (<http://www.health.vic.gov.au/hdss/vaed/index.htm>) to reference the manual for detailed information about the calculation and reporting of these data items.

The reporting of duration of CVS provided in ICU or NICU is mandatory.

Note: The counting of duration of CVS in ICU or NICU for reporting is independent of the counting of hours of CVS for coding. Thus hours of CVS can be reported to the VAED even if they do not qualify for coding.

Counting duration of CVS

1. Only CVS hours provided to an ICU patient are counted, and are only counted once that patient has been admitted to an ICU (an ICU patient can be in ED awaiting transfer).
2. If the patient has more than one period of CVS in ICU during this episode, the total duration of all such periods is reported.
3. Duration is reported in hours, rounded up.
4. Where a patient is intubated and CVS starts in an operating theatre, for the purposes of the Duration of CVS field, the counting of the duration of CVS commences when the patient enters the ICU.
5. Where a ventilated patient is absent from ICU for a period of time (for example, in theatre) and is still ventilated on return to ICU, the count is continuous. (It is no longer necessary to stop the CVS clock when a ventilated patient is transferred from the ICU to theatre and back)
6. Where a patient receives CVS in a combined ICU/CCU, report the ICU/CCU hours in the ICU field, not the CCU field.

Examples

The following examples are provided to help coders understand the calculation of CVS hours for surgical patients

CVS Initiated prior to patient going to operating room

1. Pt intubated in ED on 1/7/10 at 13.00. At 16.30 patient taken to theatre for 4 hrs. Admitted to ICU at 20.30 and was extubated at 23.50 on 1/7/10

REPORTING		CODING	
MV hrs reporting	VAED (round UP)	Total MV count	Count for coding (round DOWN)
1/7/10 20.30 - 1/7/10 23.50 3Hrs 20 mins	4	1/7/10 13.00 - 1/7/10 23.50 10 hrs 50 mins	10

Assign code 13882-00 Management of continuous ventilatory support, ≤24 hours because the patient was initially intubated for respiratory support *not* for anaesthesia.

2. Patient intubated in ED at 03.00 6/8/10. He was transferred to ICU at 04.00 6/8/10 still intubated. At 13.00 he went to theatre for 3 hrs. He returned to ICU at 16.00 and was extubated at 12:00 8/8/10.

REPORTING		CODING	
MV hrs reporting	VAED (round UP)	Total MV count	Count for coding (round DOWN)
6/8/10 04.00 - 8/8/10 12.00 56 Hrs	56	6/8/10 03.00 - 8/8/10 12.00 57 Hrs	57

Assign code 13882-01 Management of continuous ventilatory support, > 24 and < 96 hours

CVS Initiated in operating room

3. Pt intubated in theatre at 11.00 on 1/7/10. Went to ICU intubated at 16.00 after 5hrs in OR. Patient was extubated at 09.00 2/7/10.

REPORTING		CODING	
MV hrs reporting	VAED (round UP)	Total MV count	Count for coding (round DOWN)
1/7/10 16.00 - 2/7/10 09.00 17 Hrs	17	1/7/10 11.00 - 2/7/10 09.00 22 Hrs	N/A

No code assigned as patient was NOT intubated for >24 hours *post surgery*.

4. Patient intubated in OR at 9.00 on 1/7/10. After 3 hours in OR was transferred to ICU at 12.00 still intubated. Patient was extubated at 10.00 on 2/7/10

REPORTING		CODING	
MV hrs Reporting	VAED (round UP)	Total MV count	Count for coding (round DOWN)
1/7/10 12.00 - 2/7/10 10.00 22 Hrs	22	1/7/10 09.00 - 2/7/10 10.00 25 Hrs	-

No code assigned as patient was NOT intubated for >24 hours *post surgery*.

5. Patient intubated in theatre at 12.00pm 6/8/10. Was in theatre for 3 hrs. Went to ICU at 15.00 for 8 hrs and remained ventilated. Patient then returned to theatre at 23.00 for 6 hrs and went back to ICU at 05.00hrs. Patient was extubated at 17.00 on the 7/8/10.

REPORTING		CODING	
MV hrs reporting	VAED (round UP)	Total MV count	Count for coding (round DOWN)
6/8/10 15.00 - 7/8/10 17.00 26 Hrs	26	6/8/10 12.00 - 7/8/10 17.00 29 Hrs	29

Assign code 13882-01 Management of continuous ventilatory support, > 24 and < 96 hours. Even though the ventilation was initiated for surgery, it continued for >24 hours post surgery (including subsequent surgical episodes). Therefore it should be coded as CVS for 29 hours.

26 Hours are reported for VAED as the count continues for return trips to theatre (6hrs) from ICU where patients are still ventilated.

6. Patient intubated in OR on 1/8/10 at 06.00. Was in theatre for 6 hrs. Went to ICU where was ventilated for a further 20 hrs and extubated on 2/8/10 at 8.00. Patient returned to OR on 2/8 at 13.00 where they were intubated for 5 hours and returned to ICU at 18.00. Patient was extubated at 14.00 on the 3/8/10.

REPORTING		CODING	
MV hrs reporting	VAED (round UP)	Total MV count	Count for Coding (round DOWN)
1/8/10 12.00 - 2/8/10 08.00 20 Hrs and 2/8/10 18.00 - 3/8/10 14.00 20 hrs Total 40 hrs	40	1/8/10 06.00 - 2/8/10 08.00 26 Hrs and 2/8/10 13.00 - 3/8/10 14.00 25 hrs Total 51 hrs	-

No code to be assigned because in both post surgical periods the patient was not intubated for >24 hours, each post surgical period must meet coding criteria in their own right for the coding of CMV hrs to occur.

7. Patient intubated in OR on 1/8/10 at 06.00 for 6 hours. Went to ICU still intubated at 12.00 for 13 hours before returning to OR on 2/8 at 01.00 for a further 2 hours. Patient transferred back to ICU still intubated on 2/8/11 at 3.00 for a further 16 hrs before extubation on 2/8/10 at 19.00.

REPORTING		CODING	
MV hrs reporting	VAED (round UP)	Total MV count	Count for coding (round DOWN)
1/8/10 12.00 - 2/8/10 19.00 31 Hrs	31	1/8/10 06.00 - 2/8/10 19.00 37 Hrs	37

Assign code 13882-01 Management of continuous ventilatory support, > 24 and < 96 hours. Even though the ventilation was initiated for surgery, it continued for >24 hours post surgery (including subsequent surgical episodes). Therefore it should be coded as CVS for 37 hours.

8. Patient intubated in OR on 1/8/10 at 06.00. Was in theatre for 6 hours. Patient transferred to ICU while intubated at 12.00 on 1/8/10, stays intubated for 20 hours and is extubated on 2/8/10 at 8.00. Patient returns to theatre on 2/8/10 at 20.00 and is intubated for surgery. Was in theatre for 3 hrs, returns to ICU and remains intubated for 30hrs before being extubated on 4/8/10 at 5.00. Patient returns to theatre for a third time on 4/8/10 at 12.00 and is intubated for a procedure that lasts for 4 hrs and returns to ICU where they remain intubated for another 23 hours and are extubated at 15.00 on 5/8.

REPORTING		CODING	
MV hrs reporting	VAED (round UP)	Total MV count	Count for coding (round DOWN)
1/8/10 12.00 - 2/8/10 08.00 20 Hrs and 2/8/10 23.00 - 4/8/10 5.00 30 hrs 4/8/10 16.00 - 5/8/10 15.00 23 hrs Total 73 hrs	73	1/8/10 06.00 - 2/8/10 08.00 26 Hrs and 2/8/10 20.00 - 4/8/10 05.00 33 hrs 4/8/10 12.00 - 5/8/10 15.00 27 hrs Total 86 hrs	33

Assign code 13882-01 Management of continuous ventilatory support, > 24 and < 96 hours. Only one period of intubation meets the criterion for coding, which was the second trip to theatre. The other two periods did not meet the criteria therefore can't be included in the total calculation of CVS hours for coding.