

Section 5— Compilation and Submission

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Submission Overview

Every electronic file submitted to the VEMD must be:

- In the correct File Structure
- Named according to the File Naming Convention
- Submitted in accordance with the Schedule Requirements
- Sent to the VEMD email address: **submit.vemd@dhs.vic.gov.au**
- Resubmitted until there are zero REJECTION and NOTIFIABLE errors.

File Structure

The file structure details the sequence, length, type and layout of data items to be transmitted to the VEMD.

File Structure Notes:

- All alpha characters must be in UPPERCASE (optional for Description of Injury Event)
- Do not zero fill items unless specified
- Padding fields with space characters (either to the left or right) is unnecessary
- Conditional mandatory items: See Conditional Mandatory Items Key below for the conditions under which they become mandatory.
- The column headed Excel Position indicates the column in which each data item must be located in the file, see also Section 5 – Compilation and Submission (File Format).

Conditional Mandatory Items Key

Key	Descriptor
M	Mandatory item
Ⓔ	Mandatory if Medicare Suffix does not equal C-U, N-E or P-N
§	Mandatory if Referred By = 6
*	Should be reported if Arrival Transport Mode = 1, 2, 3, 10
†	Mandatory if Departure Status = '4 – Another Hospital Campus'
⊛	Primary Diagnosis is a mandatory item, for all Departure Status codes other than '10 – Left after clinical advice, regarding treatment options' and '11 – Left at own risk, without treatment'. For Departure Status codes 10 and 11 Primary Diagnosis must not be recorded. If Diagnosis is an injury, complete all the Injury Surveillance data fields
⊙	Mandatory if any other Injury Surveillance items are completed, or if an injury code from the Nature of Main Injury & Body Region Matrix is in the Primary Diagnosis item
⌘	Optional for Departure Status '10 – Left after Clinical Advice regarding Treatment Option', OR '11- Left at Own Risk, Without Treatment'.
▼	Mandatory if the Nurse is the definitive service provider (except where Departure Status = '10 – Left after clinical advice, regarding treatment options' or '11 – Left at own risk, without treatment').
❖	Mandatory if the Doctor is the definitive service provider (except where Departure Status = '10 – Left after clinical advice, regarding treatment options' or '11 – Left at own risk, without treatment').
Ⓞ	Mandatory if Primary Diagnosis code = 'Z099 – Attendance for Follow-up (includes injections) / Review following earlier treatment'.
↗	Mandatory if an inpatient bed request was made, regardless of whether the patient is actually moved to an inpatient bed.
⌘	Optional if Primary Diagnosis item is completed
©	Mandatory if Compensable Status = 2
‡	Optional if Departure Status = '4 – Another Hospital Campus'

	Field Name	Maximum Characters	Alpha / Numeric	Format / Values	Excel Position
M	Campus Code	4	A/N	XXXX	A
M	Unique Key	9	A/N	XXXXXXXXXX	B
Patient Biographic					
M	Patient Identifier	10	A/N	XXXXXXXXXX	C
☺	Medicare Number	11	N	NNNNNNNNNNNN or blank	D
M	Medicare Suffix	3	A/N	XXX	E
©	DVA Number	9	A/N	See detailed specification: VEMD Manual, 3-47	F
M	Sex	1	A/N	1, 2, 3, 4	G
M	Date of Birth	8	N	DDMMCCYY	H
M	Country of Birth	4	A/N	XXXX	I
M	Indigenous Status	1	A/N	2, 5, 6, 7, 8, 9	J
M	Interpreter Required	1	A/N	1, 2, 3	K
M	Preferred Language	2	A/N	XX	L
M	Locality	22	A/N	XXXXXXXXXXXXXXXXXXXXXX XX	M
M	Postcode	4	N	NNNN	N
M	Type of usual Accommodation	2	A/N	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 18, 19	O
Patient Management Data					
M	Arrival Transport Mode	2	A/N	1, 2, 3, 6, 8, 9, 10, 11, 99	P
M	Referred By	2	A/N	0, 1, 2, 4, 6, 8, 9, 10, 13, 19	Q
§	Transfer Source	4	A/N	XXXX	R
M	Type of Visit	2	A/N	1, 2, 8, 9, 10	S
M	Compensable Status	1	A/N	1, 2, 3, 4, 5, 6, 7	T

*	Ambulance Case Number	4	A/N	See detailed specification: VEMD Manual, Section 3.	U
M	Arrival Date	8	N	DDMMCCYY	V
M	Arrival Time	4	N	HHMM	W
M	Triage Date	8	N	DDMMCCYY	X
M	Triage Time	4	N	HHMM	Y
M	Triage Category	1	A/N	1, 2, 3, 4, 5, 6	Z
▼	First Seen by Treating Nurse Date	8	N	DDMMCCYY or Blank	AA
▼	First Seen by Treating Nurse Time	4	N	HHMM or Blank	AB
❖	First Seen by Treating Doctor Date	8	N	DDMMCCYY or Blank	AC
❖	First Seen by Treating Doctor Time	4	N	HHMM or Blank	AD
⌘	Procedure	89	A/N	XX (x30)	AE
↗	Inpatient Bed Request Date	8	N	DDMMCCYY or Blank	AF
↗	Inpatient Bed Request Time	4	N	HHMM or Blank	AG
M	Departure Date	8	N	DDMMCCYY	AH
M	Departure Time	4	N	HHMM	AI
M	Departure Status	2	A/N	0, 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13	AJ
†	Transfer Destination	4	A/N	XXXX	AK
M	Referred to on Departure	2	A/N	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 16, 17, 18, 19	AL
†	Reason for Transfer	1	A/N	1, 2, 3, 4, 5, 6, 7, 9	AM
‡	Escort Service	1	A/N	1, 2, 3, 4, 5, 9 or blank	AN
†	Departure Transport Mode	2	A/N	1, 2, 3, 4, 6, 7, 8, 10, 11, 19	AO

⊕	Primary Diagnosis	5	A/N	ICD-10-AM VEMD Code	AP
☞	Additional Diagnosis 1	5	A/N	ICD-10-AM VEMD Code	AQ
	Additional Diagnosis 2	5	A/N	ICD-10-AM VEMD Code	AR
Injury Surveillance Data					
⊙ ✕	Nature of Main Injury	2	A/N	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26	AS
⊙ ✕	Body Region	2	A/N	F1, F2, F3, F4, F5, F6, F7 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22	AT
⊙ ✕	Description of Injury Event	250	A/N		AU
⊙ ✕	Injury Cause	2	A/N	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30	AV
⊙ ✕	Human Intent	2	A/N	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	AW
⊙ ✕	Place Where Injury Occurred	1	A/N	H, I, S, A, R, T, C, Q, F, M, P, O, U	AX
⊙ ✕	Activity When Injured	1	A/N	S, L, W, E, C, N, V, O, U	AY

File Naming Convention

Every file submitted to the VEMD must be named as follows:

File Naming Convention	AAAABnna.txt		
Where:	AAAA	=	Campus Code (for example: 1010)
	B	=	Version of the dataset (for example: 2005-06 is version 10)
	nn	=	Month of Transmission
	a	=	Data Submission Indicator (1 st submission 07a, 2 nd 07b)
Example:			
	1010007a.txt (<i>please zip the file before submission via e-mail 1010007a.zip</i>)		

Schedule Requirements

Transmission of Emergency Department data

Hospitals receiving the non-admitted emergency services grant will transmit data to the VEMD according to the following timelines:

<i>VEMD</i>	<i>Timeline</i>
First 14 days of the month	At least one submission must be received by the 21 st of the reporting month (for example, 1-14 July data by 21 July).
Full month	Remainder of the month must be supplied by the 10 th of the following month. Must be complete, i.e. zero rejection and notifiable edits, by the 21 st of the following month (for example, July data by 21 August).

Note: The Department will endeavour to process data on the day of receipt where it is received by 12:00 pm. The Department will endeavour to process data by the next business day where it is received on a non-business day or after 12:00pm.

Where hospitals are non compliant with these timelines, the department will apply a penalty no greater than:

- (a) \$2000 if a file containing data from the first 14 days of the month and/or the full month is not submitted by the timeline specified.
- (b) \$1000 for each record from the full month that is not completed by the timeline specified.
- (c) \$2000 for each record from the full month that is not completed within one month of the timeline specified.

If difficulties are anticipated in meeting the data transmission timelines, the hospital must write to the Department, indicating the nature of the difficulties, remedial action being taken, and the expected transmission schedule. Exemptions for late submission of data will generally only be considered for computer system problems that are beyond the control of the hospital. For the period that the hospital is unable to supply unit record data, the hospital may be asked to submit aggregate data.

Period of Extract

All records for patients who **depart** in a particular calendar month should be submitted in the corresponding monthly file. That is, if a patient attends the ED on 30 July 2005 and departs on 1 August 2005, the record should be submitted in the August file (containing discharges from 1 August to 31 August 2005), **NOT** in the July file.

Partial Submissions

All hospitals are required to submit a file containing data for at least the first 14 days of the month by the 21st of that month. This is to provide the Statewide Emergency Program unit with access to more up-to-date VEMD information.

Once a record has been submitted for the first time, it is only necessary to resubmit the record in cases of corrections or updates. There is no necessity to resubmit records that have already passed (unless resubmission is requested by HDSS for other reasons).

Records received in subsequent submissions for each month are either appended to the original file, or if applicable, they correct/update/delete earlier records.

By transmitting data before the end of the month hospitals will significantly reduce the likelihood of 'Data Quality and Timeliness penalties' without increasing the number of file submissions.

An example, assuming 100 Emergency Department (ED) attendances per day:

Date	Action
16 July	Hospital submits the first 1400 episodes (that occurred from 1 to 14 July).
17 July	Data is processed. 1391 records are rejection free; 9 errors are returned to hospital.
23 July	Hospital submits the 9 corrections plus the next 700 episodes (from 15 to 21 July).
24 July	Data is processed. 2094 are now free of rejection edits; 6 new errors are returned to the hospital (including 2 notifiable edits).
29 July	Hospital sends email to VEMD to verify data transmitted in the records allocated the notifiable edits.
31 July	DHS sends acknowledgement of email and informs the hospital it has accepted 1 record as submitted but rejected the second record.
2 August	Hospital submits the 5 corrections (4 rejections and 1 notifiable) plus the next 1000 episodes (that occurred from 22 to 31 July).
4 August	Data is processed. 3094 are now free of rejection edits; 6 new errors are returned to the hospital.
5 August	Hospital submits 6 corrections.
6 August	Data is processed. July file is now complete and free of rejection and notifiable edits.

File Format

Every file must be submitted:

- In the Tenth Edition order as specified in this document, for discharges on and from 1 July 2005 to 30 June 2006 (See File Structure).
- In tab (**not** comma) delimited ASCII format. Where data in non-mandatory items is unavailable the field position should be denoted by a **tab**.
- With each record separated by a carriage return and line feed.
- Saved as a text file (.txt).
- Compressed into a '.zip' file using a utility such as WinZip, using allocated passwords.

Software suppliers are advised to have the capacity to generate earlier versions of the VEMD file formats to enable hospitals to, at any time, extract files using the version appropriate for the extraction period. (See table: Edits and the Submission process).

Also note that in relation to data format:

- Data transmitted to VEMD must only include codes specified in the File Structure (See Section 5 – Compilation and Submission). Local systems may collect data through the use of other codes, acronyms or text; however, these must be converted into appropriate VEMD format for submission to VEMD.
- Only VEMD ICD-10-AM diagnosis codes, Section 8 – Supplementary Code Lists, must be utilised for submission. Do not utilise the ICD-10-AM coding books as not all codes are included and a degree of code variation exists between codes used in the VEMD and those used in the VAED.
- Procedures: Multiple procedure codes will count as one item even though the Manual allows for the transmission of up to 30 Procedure codes. Each Procedure code should be separated by a left curly bracket {.
- Description of Injury Event: The text for this item does not need to be enclosed in quotation marks (i.e. "textual information") as each tab separates the items. Quotation marks can be used to emphasise words within the text.

File Security

Data files transmitted by VEMD reporting hospitals via electronic mail should be password encrypted using WinZip to deter unauthorised access. Passwords are allocated by the Department and are required to open VEMD data files attached to e-mail messages.

Please contact the HDSS Help Desk if you have not received a password, see Section 1 – Introduction (Contact Details).

Data Quality

Edits

Input Edits

Upon receipt, HDSS applies a series of 'input edits' (see Section 7 - Editing) to the data. These edits are intended to validate certain aspects of the data at the episode level.

Wherever possible, edits should also be maintained within the Emergency Department's in-house data information system to minimise rejection of records from the DHS editing program.

Section 7 – Editing, provides edits in number order with details of the edit title, data items involved, the effect of the edit, the problem and the remedy. The table below outlines the problem and remedy for the four possible edit effects:

<i>Effect</i>	<i>Problem</i>	<i>Remedy</i>
Run terminated	The monthly data file is corrupt or contains data that may compromise the dataset integrity.	Hospital determines and resolves the data problem and resubmits data file.
Rejection	Data item/s in the attendance record did not meet the criteria specified in the business rules.	Hospital determines the cause of the rejection, corrects it and resubmits the monthly data file. Zero rejections must be achieved for each monthly data file to be accepted into the VEMD (See also Schedule Requirements, Section 5).
Notifiable	Data item/s in the attendance record could be correct, but in reality only on extremely rare occasions. The immediate effect is identical to a rejection.	Hospital determines the cause of the rejection and either : <ul style="list-style-type: none">• Sends an email to DHS verifying the accuracy of the data; OR• Corrects and re-submits the record. DHS will assess the verification provided and will determine if the record can be accepted into the VEMD or requires further attention.

<i>Effect</i>	<i>Problem</i>	<i>Remedy</i>
Warning	Record was acceptable but data item/s in the attendance record were questionable.	Hospital checks that the data is valid. If necessary, the data is corrected and resubmitted.

Output Edits

As well as editing the data at the episode level, HDSS also routinely checks data at an aggregate level. It is possible for data to be valid at the episode level, but meaningless when viewed from a different perspective. For example reporting a Country of Birth of 6106 (Nepal) is valid at the episode level, but if Country of Birth for every episode for an entire month is 6106 then it would be highly unlikely that the data would be accurate. Resolution of these issues usually involves some dialogue between site and DHS. It can occur several ways including:

- Resubmission,
- Software or reference data alteration
- DHS simply noting it in metadata where unusual occurrences turn out to be accurate
- Changes in collection practises, clarification of aspects of collection.

It should be noted that data can be considered to be 'rejected' at the output edit level as well as the input edit level.

Deletion of Episode Records

Deletion of a record previously submitted to VEMD requires the record to be resubmitted with eleven '9's in the Medicare Number field. Simply submitting a file without the deleted record is not enough because all previously submitted records are active unless overwritten by later records with the same Unique Key.

It is important for software to have the capacity to report deletions that occur in-house as they can be a cause of significant confusion, and unnecessary manual intervention for submission officers. Most confusion occurs where a record may have been submitted some time ago, then deleted in-house, but still remains active and triggering edits at DHS. Note however, that the edit reports do identify the file in which the record was last received (for example the 'a' file).

Patients 'Remaining In' on 30 June 2005

The format of the VEMD, Tenth Edition is to be implemented for patients who depart the Emergency Department on or after 1 July 2005. This includes patients who remain in the Emergency Department after midnight on the 30 June 2005.

Test Transmissions

The Department of Human Services recognises that software suppliers can experience difficulties making the 1 July revisions to their programs and that distributing untested programs to clients is unsatisfactory. It can also be difficult for hospitals to resolve problems caused by using untested software. The Department will therefore be making a test submission facility available to software suppliers and encourages all suppliers to test new programs before using them to send live data to VEMD.

After making the necessary programming changes to meet the revised requirements, each software supplier can send a reasonable number of tests, without charge.

Each test can be sent to the usual submission email address: Submit.VEMD@dhs.vic.gov.au

The transmission must contain a control report file and data file. However, you should clearly mark the **email**, not the data file as 'TEST DATA'.

This will be processed by the Department and returned to you within 3 working days.

Staff at the Department will, if requested, assist in identifying problems. However, there is no approval process for testing 1 July updates. Once the supplier and/or the hospital are satisfied that the new software meets the specifications as defined by the Department, live transmissions can commence.

VEMD Editor

The Department has developed a VEMD Editor that provides hospitals with the opportunity to run their VEMD data through an editing process before sending it to HDSS.

The VEMD Version 10 Editor is available for download at:

<http://www.health.vic.gov.au/hdss/vemd/2005-06/vemdv10edito1.0.0.zip>

It is designed to reduce the number of submissions and associated administrative overhead that hospitals incur by identifying almost all errors before submission.

MS Access 2000 or higher is required to run this software. The software is free and open source. Users are encouraged to identify deficiencies and suggest improvements. Instructions are available on the HDSS website.

Documentation and Procedures

It is expected that sites will have a robust succession policy to ensure that more than one staff member is aware of processes relating to submission and management of VEMD data at any point in time.

To ensure that management of VEMD data is not compromised by staff turnover or modifications to software all procedures relating to the extraction, correction, completeness and accuracy of VEMD data must be clearly documented and accessible.

Any manual intervention must be included in documentation to ensure that a whole of process document is available at all times.

Leave and staff turnover issues will not automatically be viewed as sufficient grounds for waiving penalties for late submission.

HDSS policy on data manipulation

In the normal course of business HDSS will not condone manipulation of any data extracts (for example with Microsoft Excel, Notepad or any other data manipulation tool) that causes change in data values prior to processing by the Department. The rationale for this is as follows:

- It is expected that hospitals have a contractual arrangement with software vendors that obliges vendors to provide software to hospitals that allows them to meet their statutory reporting requirements. Hospitals are strongly advised to factor into contract negotiations, the impact of data quality and timeliness penalties that may apply where the vendor fails to deliver a product that meets statutory reporting requirements. In effect the vendor's software should be capable of producing an extract in the format required by HDSS. HDSS acknowledges that any software may have the potential to extract data that can trigger "Rejection" edits from time to time. Software vendors and hospitals should work together to ensure that, where this occurs, data can be and are corrected via the hospital's relevant operational database, thus eliminating the need for secondary data manipulation.
- A major source of errors and corruption of extract data appears to be the inappropriate use of third party software such as Excel.
- "Correcting" errors in the extract, but not in the hospital's operational database can lead to a misrepresentation of the hospital's true position.
- There is an audit requirement that data received by HDSS is an accurate reflection of the hospital's medicolegal system of record.

Responsibilities of the hospital

In situations where software does not allow the hospital to meet its reporting obligations hospitals should, in the first instance, report the problem to their software vendor immediately. The terms of the contract should ensure that these problems are addressed as a priority. In these situations the use of third party data manipulation software may be an inevitable short-term consequence. In such cases the hospital must:

- Notify HDSS in writing of the specific problem, including the affected fields.
- Specify the plan and timeframe negotiated between the hospital and vendor for the resolution of the situation.
- Receive written permission from HDSS before proceeding with the proposed data manipulation.

HDSS will maintain a register of such occurrences. Failure to meet the above conditions may result in the application of data quality and timeliness penalties. The written permission advice will include a date by which HDSS expects the problem to be resolved and data manipulation to cease. If the problem has not been resolved by this date hospitals need to advise HDSS again of progress.

Responsibilities of HDSS

In rare circumstances a hospital may prefer HDSS to adjust an extract in order to address a specific data quality issue. HDSS will only consider this where:

- it believes that all other avenues have been exhausted, and
- the hospital requests the changes in writing, confirming that it has made the changes to its own data (or indicating that this is not possible), and
- that the changes accurately reflect the hospital's medicolegal system of record.

HDSS will maintain a register of such occurrences.

