Accurate completion of the MCCD

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Medical Reviewers
Death Certification Review Service

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Supporting better quality health and
social care for everyone in Scotland

Healthcare Improvement Scotland

Many parts, one purpose - better quality health and social care for everyone in Scotland.

- Advice on new medicines
- Advice on health technologies
- Standards, guidelines and indicators
- Inspections and reviews
- Enabling health and social care improvement
- Death Certification Review Service
- Scottish Patient Safety Programme
- Improving antibiotics use
- Making the public voice count
- Global quality improvement webinars

Acknowledgement

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Agenda

- Death Certificate - purpose
- Death Certificate - walk through and examples

Quick quiz

- Does active HBV count as a hazard in the DH1 section of the MCCD?
- My patient died from a hypoxic brain injury 2 days after a suicide attempt, should I issue a death certificate?
- Cerebrovascular accident is allowed to be written on death certificates?
- TNM staging is encouraged be on the MCCD for cancer deaths?
- Filling in the durations of conditions is optional?
- This patient died in hospital after being transferred from prison. He was still in custody when he died. Does this need to go to the Fiscal?

Medical certificate of cause of death (MCCD)

- Statutory legal document, recording the fact of death
- Doctor's signature attesting to a 'truthful and accurate account'
- Permits relatives to formally register the death & plan funeral
- Relatives require 'Extract of Registration of Death' to settle estates.
- Public health purposes:
    - Recording of mortality data
    - Monitoring the health of the nation
    - Formulating public health policy
    - Assessing the effectiveness of health services
    - Designing healthcare programmes
    - Resource allocation & spending priorities

MCCD - The Basics

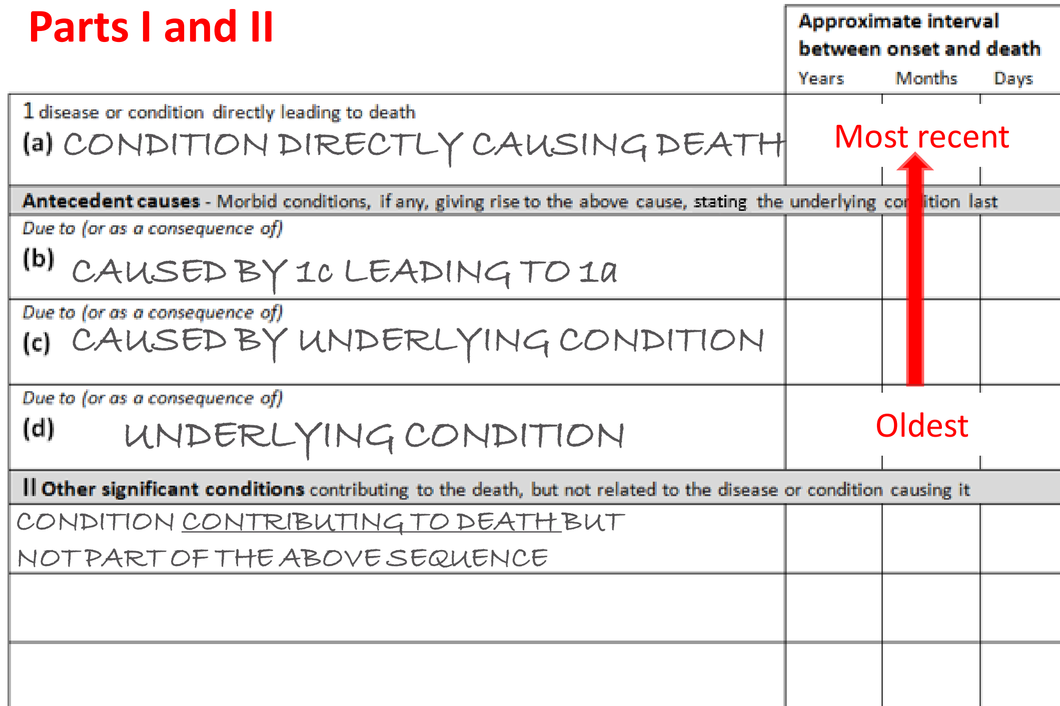
- Junior staff - discuss cause of death with senior colleague
- Write clearly
- Business contact telephone number – not personal mobile number
- Check your spelling
- Do not use abbreviations other than
  - HIV
  - AIDS
  - COVID-19 disease
  - SARS-CoV-2
- Be as specific as you can – types of dementia / site and histology of cancer / type and site of stroke / site and microbiology of infections etc
- Certainty is not required, but you must certify to the best of your knowledge and belief
- You may use qualifiers (presumed, suspected etc)
- Consider if the death is reportable to the Procurator Fiscal

Time of death

Time of death
(24-hour clock – hh:mm)

- The time of death is the time that to the best of your knowledge and belief you think the patient died and NOT the time that death was verified
- Give one date and time

CAUSE OF DEATH / CONTRIBUTORS
Parts I and II



Approximate interval between onset and death

	Years	Months	Days
1 disease or condition directly leading to death (a) CONDITION DIRECTLY CAUSING DEATH			
Antecedent causes - Morbid conditions, if any, giving rise to the above cause, stating the underlying condition last			
Due to (or as a consequence of) (b) CAUSED BY 1c LEADING TO 1a			
Due to (or as a consequence of) (c) CAUSED BY UNDERLYING CONDITION			
Due to (or as a consequence of) (d) UNDERLYING CONDITION			
II **Other significant conditions** contributing to the death, but not related to the disease or condition causing it			
CONDITION CONTRIBUTING TO DEATH BUT NOT PART OF THE ABOVE SEQUENCE			

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Durations

The minimum duration for a condition is 1 day

The approximate interval between the onset of each disease, injury or condition should be used for each line in part 1 and part 2

Only one of the boxes needs to be completed (years, months or days)

“Old age” and congenital conditions do not require a duration

Approximate interval between onset and death

Years	Months	Days

Most recent

underlying condition last

Oldest

or condition causing it

Examples of reasonable sequences

- 65 year old man with NSTEMI 3 years ago and ongoing exertional angina.
- Also has severe COPD with FEV1 40% predicted, OA, Depression, Gout.
- Rang 999 because of chest pain.
- Paramedics arrived to find him collapsed and unresponsive. VF on ECG.
- CPR sadly unsuccessful.

PLEASE PRINT CLEARLY IN BLOCK CAPITALS AND DO NOT ABBREVIATE

	Approximate interval between onset and death: Years	Months	Days
I Disease or condition directly leading to death * (a) PROBABLE MYOCARDIAL INFARCTION			1
Antecedent causes — Morbid conditions, if any, giving rise to the above cause, stating the underlying condition last			
due to (or as a consequence of) (b) ISCHAEMIC HEART DISEASE	3		
due to (or as a consequence of) (c)			
due to (or as a consequence of) (d)			
II Other significant conditions contributing to the death, but not related to the disease or condition causing it			
CHRONIC OBSTRUCTIVE PULMONARY DISEASE	10		

* *This does not mean mode of dying, such as heart or respiratory failure; it means the disease, injury or complication that caused death.*

PART D - HAZARDS

To the best of your knowledge and belief:		Y	N
DH1	Does the body of the deceased pose a risk to public health: for example, did the deceased have a notifiable infectious disease or was their body "contaminated", immediately before death?		✓
DH2	Is there a cardiac pacemaker or any other potentially explosive device currently present in the deceased?		✓
DH3	Is there radioactive material or other hazardous implant currently present in the deceased?		✓

SAMPLE

TIPS: Certainty about cause of death is not required. You may use qualifiers (presumed, probable etc)

Examples of reasonable sequences

Woman of 72 with PMH:

- T1DM 17 years
- Hypertension 12 years
- Lacunar infarct 4 years
- SCC oesophagus 4 months ago – stented but losing weight.
- Admitted with dense left hemiparesis. CT Brain shows right TACI.
- Dies as a result of stroke

PART C - CAUSE OF DEATH

PLEASE PRINT CLEARLY IN BLOCK CAPITALS AND DO NOT ABBREVIATE

	Approximate interval between onset and death		
	Years	Months	Days
I Disease or condition directly leading to death *			
(a) TOTAL ANTERIOR CIRCULATION CEREBRAL INFARCT			5
Antecedent causes – Morbid conditions, if any, giving rise to the above cause, stating the underlying condition last			
due to (or as a consequence of) (b) CEREBROVASCULAR DISEASE	4		
due to (or as a consequence of) (c) TYPE 1 DIABETES MELLITUS AND HYPERTENSION (JOINT CAUSES)	17		
due to (or as a consequence of) (d)			
II Other significant conditions contributing to the death, but not related to the disease or condition causing it			
SQUAMOUS CARCINOMA OF OESOPHAGUS		4	

* This does not mean mode of dying, such as heart or respiratory failure; it means the disease, injury or complication that caused death.

TIPS – CVA will be rejected by the reg. Be as specific as you can – bleed / infarct, site etc

Hazards

PART D - HAZARDS

To the best of your knowledge and belief;		Y	N
DH1	Does the body of the deceased pose a risk to public health: for example, did the deceased have a notifiable infectious disease or was their body "contaminated", immediately before death?		✓
DH2	Is there a cardiac pacemaker or any other potentially explosive device currently present in the deceased?		✓
DH3	Is there radioactive material or other hazardous implant currently present in the deceased?		✓

Hazards must be entered or it is a reissue

- Use ticks ✓ not Y or N or crosses ✗
- May have hazards unrelated to cause of death

Examples – Hazards

(This is by no means an exhaustive list)

DH1

- Blood borne viruses
- COVID, SARS, MERS
- Viral haemorrhagic fevers
- Prions
- Some bacteria – eg active TB, meningococcal etc

DH2

- Battery containing devices
- PPM, CRT, ICD
- Implantable loop recorders
- Intrathecal pumps
- Neurostimulators
- Some VP shunts
- Fixion nails

DH3

- Brachytherapy seeds
- Other radio - pharmaceuticals

Examples of reasonable sequences

Woman aged 65 with PMH:

- Pancreatic adeno Ca, liver mets diagnosed 1 month ago and rapid deterioration since. Deeply jaundiced.
- Had T2DM 16 years, STEMI 8 years ago, Pacemaker for CHB. Also mild asthma and bipolar disorder which are well managed.
- Died at home peacefully from her cancer

PART C - CAUSE OF DEATH

PLEASE PRINT CLEARLY IN BLOCK CAPITALS AND DO NOT ABBREVIATE

	Approximate interval between onset and death Years	Months	Days
I Disease or condition directly leading to death * (a) PROGRESSIVE LIVER METASTASES		1	
Antecedent causes – Morbid conditions, if any, giving rise to the above cause, stating the underlying condition last			
due to (or as a consequence of) (b) ADENOCARCINOMA OF PANCREAS		8	
due to (or as a consequence of) (c)			
due to (or as a consequence of) (d)			
II Other significant conditions contributing to the death, but not related to the disease or condition causing it			
TYPE 2 DIABETES MELLITUS (ON INSULIN)	16		
ISCHAEMIC HEART DISEASE	8		

* This does not mean mode of dying, such as heart or respiratory failure; it means the disease, injury or complication that caused death.

PART D - HAZARDS

To the best of your knowledge and belief;		Y	N
DH1	Does the body of the deceased pose a risk to public health: for example, did the deceased have a notifiable infectious disease or was their body "contaminated", immediately before death?		✓
DH2	Is there a cardiac pacemaker or any other potentially explosive device currently present in the deceased?	✓	
DH3	Is there radioactive material or other hazardous implant currently present in the deceased?		✓

SAMPLE

TIP: Staging of cancer should not be included eg TNM or Gleason score

Doctor who ‘attended’

Attendance on deceased *(tick one)*	
A1	I was in attendance upon the deceased during last illness
A2	I was not in attendance upon the deceased during last illness: the doctor who was is unable to provide the certificate
A3	No doctor was in attendance on the deceased

- Doctor who ‘attended’
  - Cared for the patient during the illness or condition that led to death
  - Familiar with the patient’s medical history, investigations and treatment
- A3

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Additional information 'X box'

Extra information for statistical purposes *(tick if applicable)*	
X	I may be able to supply the Registrar General with additional information

Only tick this if you are waiting for:

- Histology
- Toxicology
- Microbiology
- Or other results which may add detail to the stated cause of death

National Records Scotland will send a 'Medical Enquiry' letter to the named Consultant or GP in a few weeks time.

Does the death needs to be reported to the Procurator Fiscal?

3. Categories of death to be reported

The following deaths must be reported to the Procurator Fiscal ('reportable deaths'):

Unnatural cause of death:

Any death which cannot be entirely attributed to natural causes (whether the primary cause or a contributing factor) including:

- Suspicious deaths – i.e. where homicide cannot be ruled out
- Drug related deaths - including deaths due to adverse drug reactions reportable under the Medicines and Healthcare Products Regulatory Agency (MHRA) (Yellow Card Scheme)
- Accidental deaths (including those resulting from falls)
- Deaths resulting from an accident in the course of employment
- Deaths of children from overlaying or suffocation
- Deaths where the circumstances indicate the possibility of suicide

Natural causes which require Procurator Fiscal reporting – examples

(list not exhaustive)

- Deaths due to neglect (incl self neglect) or fault
- Sudden or unexpected child death or unexplained perinatal death
- Death of a child in care, or on child protection register
- Deaths from industrial illness (Mesothelioma, pulmonary fibrosis due to asbestos, pneumoconiosis etc)
- Deaths from notifiable disease that pose an acute and serious risk to public health
- Death of a person under section of Mental Health Act or Community Treatment Order
- Deaths in legal custody
- Deaths which are likely to be subject to Adverse Event Review, concern or complaint by relatives or staff

Procurator Fiscal reportable case examples

CAUSE OF DEATH

Direct Cause:	Subdural Haematoma and Subarachnoid Haemorrhage
Antecedent Cause (b):	Head Injury
Antecedent Cause (c):	
Antecedent Cause (d):	
Other Condition Line 1:	Congestive Cardiac Failure;
Other Condition Line 2:	Severe Mitral Regurgitation
Other Condition Line 3:	

- Clearly a death due to an accident
- PF will take a report and decide on whether to investigate – with a view to health and safety of others

Procurator Fiscal reportable case examples

CAUSE OF DEATH

		Approximate interval between onset and death		
		Years	Months	Days
Direct Cause:	Bronchopneumonia			21
Antecedent causes - Morbid conditions, if any, giving rise to the above cause, stating the underlying condition last				
Antecedent Cause (b):	Bronchiectasis	2	3	
Antecedent Cause (c):	Pulmonary Fibrosis	2	3	
Antecedent Cause (d):	Asbestos Exposure	40		
Other significant conditions contributing to the death, but not related to the disease or condition causing it				
Other Condition Line 1:	Vascular Dementia	2		
Other Condition Line 2:	Ischaemic Heart Disease	23		
Other Condition Line 3:				

- This case was reported and proceeded to fiscal PM

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COVID-19 disease / SARS-CoV-2 infection

- COVID-19 disease and SARS-CoV-2 infection are the acceptable terms.

- If COVID-19 is believed to have contributed to the death then it should be included on the MCCD.

COVID-19 disease - Hazard?

Consider if the body of the deceased poses a hazard

The duration that a person remains infectious is uncertain.

If, in your judgement, there is a hazard to those handling the body after death from the body then tick the DH1 hazard box

It is advisable to be prudent.

Cevik M, Kuppalli K, Kindrachuk J and Peiris M. Virology, transmission, and pathogenesis of SARS-CoV-2. BMJ 2020;371:m3862.
https://doi.org/10.1136/bmj.m3862

COVID example

64 year old woman living at home

- PMH: Type 2 diabetes on insulin, hypertension, atrial fibrillation
- COVID symptoms 5 days ago tested positive on PCR
- Became acutely short of breath last night and called 999
- Sats 80% air, Pulse 120, RR 30/min, Temp 38.7
- Taken to ITU, ARDS picture
- Multiple organ failure
- Died 4 days after admission

	Approximate interval between onset and death		
	Years	Month	Days
1 disease or condition directly leading to death **(a) MULTIPLE ORGAN FAILURE**			**3**
Antecedent causes - Morbid conditions, if any, giving rise to the above cause, staying the underlying condition last			
Due to (or as a consequence of) **(b) ACUTE RESPIRATORY DISTRESS SYNDROME**			4
Due to (or as a consequence of) **(c)** COVID-19 DISEASE			9
Due to (or as a consequence of) **(d)**			
II Other significant conditions contributing to the death, but not related to the disease or condition causing it			
HYPERTENSION	13		
TYPE 2 DIABETES MELLITUS	6		

PART D - HAZARDS

To the best of your knowledge and belief;		Y	N
DH1	Does the body of the deceased pose a risk to public health: for example, did the deceased have a notifiable infectious disease or was their body "contaminated", immediately before death?	✓	
DH2	Is there a cardiac pacemaker or any other potentially explosive device currently present in the deceased?		✓
DH3	Is there radioactive material or other hazardous implant currently present in the deceased?		✓

COVID-19 disease and the Procurator Fiscal

Report to PF if COVID-19 disease / SARS-CoV-2 infection contributed to death if:

- Deceased was a care home resident when virus contracted
- Reasonable grounds to suspect that virus was contracted in course of occupation or employment
- Virus contracted in hospital - if fulfils section 3e or 3g of Procurator Fiscal guidance (includes deaths which may cause public anxiety or where family or staff have raised a concern)

COVID-19 reportable to Procurator Fiscal

87year old lady in care home for last 2 years.

- Main issue is progressive Alzheimer's Disease.
- Also has IHD and occasional angina
- Outbreak of COVID-19 in the care home, PCR positive and died 6 days after symptom onset

Direct Cause:	Covid-19 disease
Antecedent Cause (b):	
Antecedent Cause (c):	
Antecedent Cause (d):	
Other Condition Line 1:	Alzheimers Dementia
Other Condition Line 2:	Ischaemic heart disease
Other Condition Line 3:	

TIP: as COVID was contracted in care home, this should be reported to PF

Summary

- Run through of how to complete the MCCD
- Reminder of how to certify COVID deaths
- Reminder of what deaths to report to PF

Quick quiz

- Does active HBV count as a hazard in DH1 section of the MCCD? YES
- My patient died from a hypoxic brain injury 2 days after a suicide attempt, should I issue a death certificate? NO – it should be reported to the PF – unnatural death
- Cerebrovascular accident is allowed to be written on death certificates? NO- the registrar will reject it
- TNM staging is encouraged be on the MCCD for cancer deaths? NO – staging is not required, also TNM is an abbreviation
- Filling in the durations of conditions is optional? NO – each line of the sequence of cause of death should have a duration. Exceptions: Old age, congenital conditions
- This patient died in hospital after being transferred from prison. He was still in custody when he died. Does this need to go to the Fiscal? YES – as it is a death in custody – automatic FAI

Further guidance documents

Chief Medical Officer's Guidance

https://www.sehd.scot.nhs.uk/cmo/CMO(2018)11.pdf

Reporting Deaths to the Procurator Fiscal : Information and Guidance for Medical Practitioners

https://www.copfs.gov.uk/investigating-deaths/deaths

Support Around Death

www.sad.scot.nhs.uk/

NES Learning Module on common errors

https://learn.nes.nhs.scot/1666/death-certification

http://www.nes.scot.nhs.uk/media/2736701/mccd_power_point.pdf

Learnpro

https://nhs.learnprouk.com

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Thank you

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