

GA Form KKM Revision 2024

What's New?

1. Addition of gazetted continuation sheet for preop assessment
2. Formatting of GA Form to take into account punch-holes. Layout changes made to optimize the usage of space include omission of various diagrams/illustrations
3. Page 1 of GA Form:
 1. Addition of notes regarding additional baseline assessments: PONV history, Clinical Frailty Scale (CFS), metabolic equivalents (METs), multiple indices of airway assessment and OSA screening, operation/procedure date, previously omitted vital signs (temperature and oxygen saturation)
 2. Edits to the previous format of management plan and mode of anaesthesia to reflect contemporary practice of documentation
3. Page 2 of GA Form:
 1. Selection of anaesthesia mode is modified to reflect the current census format
 2. New categorization of monitored parameters via consolidation and additions. Newly added monitoring parameters include ocular and peripheral nerve injury (PNI) care checks (when applicable) and cuff pressure.
 3. Volatile % is now standardized to end-tidal anaesthetic gas (ETAG) to reduce ambiguity of volatile monitoring
 4. Additional rows added for drugs and fluids
 5. Pain score is now specific for the documentation of pain score in recovery only
4. Page 3 of GA Form:
 1. Regarding GA subsection:
 1. Added sub-subsections on airway intubation technique, indices of intubation difficulty, cuff pressure
 2. Edited the ventilation sub-subsection to reflect contemporary practice
 2. Regarding RA subsection:
 1. Edited multiple parameters to reflect contemporary practice
 2. Edit in language to emphasize assessment of RA efficacy prior to skin incision
 3. To reflect correctness, accessories and position has been sectioned off from the GA subsection with other edits
 4. The previous "Monitoring" subsection has been edited due to redundancy into ECG configuration and Invasive Vascular Access subsections
5. Page 4 of GA Form:
 1. Pain score on discharge now needs indication of the scale used (VAS/FLACC)
 2. PONV is now an assessed field prior to discharge from recovery and must either be none or treated

Appendix A (Guidance regarding the use of the GA Form 2024)

Page 1 GA Form:

1. All assessments based on history and physical examination are mandatory unless in special circumstances
2. Assessments based on blood investigations should be done based on clinical guidelines and clinical scenario
3. The Clinical Frailty Scale is a clinical, history-taking based modality of assessing a patient's clinical status and can be administered when METs is not assessable. The user can refer to Appendix B as regards to the scoring system and guidance regarding negative postop outcomes in patients with frailty
4. The baseline SpO₂ should be indicated with the current level (or absence) of oxygen supplementation

Page 2 GA Form:

1. The mode of anaesthesia should be explicitly indicated as per the national census format
2. End-tidal anaesthetic gas should be monitored rather than say, the volatile dial %. The agent used should be indicated.
3. Neuromonitoring refers to CNS (e.g. BIS/cerebral oxymetry) and PNS (e.g. TOF) based monitoring. The particular parameter monitored should be indicated
4. Ocular care refers to regular observation to prevent postop visual loss (POVL) in relevant cases such as spine surgery. It is highly suggested to the user to check, e.g. every 30 minutes at a minimum, in relevant cases that the eyes are free from direct pressure. This may be indicated with a simple tick or "eyes free" specifically. "NA" (not accessible)/empty space should indicate that no assessment can be done or generally no significant risk respectively.
5. Peripheral Nerve Injury (PNI) care refers to observation to prevent injuries especially from positional PNI. If accessible, suggested actions include observation that the risk of injury to the common peroneal nerve, ulnar nerve, and brachial plexus are minimized with a simple tick. "NA" (not accessible)/empty space should indicate that no assessment can be done (e.g. during robotic prostatectomy surgery) or generally no significant risk respectively.
6. Initial cuff pressure should be documented and is now mandatory. The frequency of cuff pressure monitoring is left to the practitioner. It is suggested to monitor at least every shift if the operation time exceeds such durations and if the monitoring is feasible (e.g. non-shared airway scenarios)
7. It is recommended to indicate the timing/duration of fluids given according to the user's preference

Page 3 GA Form:

1. In general, airway technique refers to the technique used to manage the airway with the insertion of an endotracheal tube. However, it is not exclusive to techniques with the use of an endotracheal tube, e.g. rigid bronchoscopy, jet ventilation
2. As previously mentioned, the initial cuff pressure should be documented
3. The Cormack-Lehane score is generally the accepted standard to grade the laryngoscopy view. However, the percentage of glottic opening (POGO) score is a validated score that is especially relevant with the use of videolaryngoscopes (refer to Appendix C)
4. As regards to the regional anaesthesia section, the change of language to "Neurological Assessment Post Regional Anaesthesia" highlights the need of the anaesthetist to assess the efficacy of a given block before surgical incision, preferably with objective/validated testing of

the dermatomes/myotomes/peripheral nerve distribution as expected with the block performance

5. The inclusion of mechanical DVT prophylaxis is in line with an emphasis to consider its use in patients at risk of perioperative venous thromboembolism
6. In the ECG section, the user should indicate the configuration of the ECG applied
7. In the Invasive Vascular Access section, the site of the vessel cannulated should intuitively indicate the kind of access obtained (central venous vs arterial)
8. The “Anaesthetist(s)”’s name(s) shall be that of the medical doctor(s), except in East Malaysia where paramedics may administer anaesthesia. In general, the “Assistant” refers to the paramedic assisting the case (GA nurse/medical assistant/scrub nurse (in the case of the Surgeon Assistant))

Page 4 GA Form:






1. The pain score used should be indicated when documenting the pain score on discharge
2. The design of the PONV parameter is intended to ensure that PONV is either absent or acceptable prophylaxis/treatment is administered before the patient is allowed discharge. The degree of acceptable PONV status/treatment is left to the clinician’s discretion.

Anaesthetic Assessment Continuation Sheet:

1. The intention of this sheet is to have a proper gazetted document for the preop assessment of cases that are very complex or require multiple reviews or both.
2. The intention of the Problem List section is to summarize the issues involving the patient, especially those that require investigation/recitification (and hence the multiple reviews)
3. In general, each page should be limited to only one review

Appendix B: The Clinical Frailty Scale (CFS)

CLINICAL FRAILITY SCALE

	1	VERY FIT	People who are robust, active, energetic and motivated. They tend to exercise regularly and are among the fittest for their age.
	2	FIT	People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally , e.g., seasonally.
	3	MANAGING WELL	People whose medical problems are well controlled , even if occasionally symptomatic, but often are not regularly active beyond routine walking.
	4	LIVING WITH VERY MILD FRAILITY	Previously "vulnerable," this category marks early transition from complete independence. While not dependent on others for daily help, often symptoms limit activities . A common complaint is being "slowed up" and/or being tired during the day.
	5	LIVING WITH MILD FRAILITY	People who often have more evident slowing , and need help with high order instrumental activities of daily living (finances, transportation, heavy housework). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation, medications and begins to restrict light housework.

	6	LIVING WITH MODERATE FRAILITY	People who need help with all outside activities and with keeping house . Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.
	7	LIVING WITH SEVERE FRAILITY	Completely dependent for personal care , from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~6 months).
	8	LIVING WITH VERY SEVERE FRAILITY	Completely dependent for personal care and approaching end of life. Typically, they could not recover even from a minor illness.
	9	TERMINALLY ILL	Approaching the end of life. This category applies to people with a life expectancy <6 months , who are not otherwise living with severe frailty . (Many terminally ill people can still exercise until very close to death.)

SCORING FRAILITY IN PEOPLE WITH DEMENTIA

The degree of frailty generally corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia**, they cannot do personal care without help.

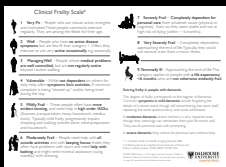
In **very severe dementia** they are often bedfast. Many are virtually mute.



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Clinical Frailty Scale ©2005–2020 Rockwood, Version 2.0 (EN). All rights reserved. For permission: www.geriatricmedicine.ca
Rockwood K et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489–495.

FIGURE 1. The Clinical Frailty Scale (CFS) version 2.0



Top Tips to help you use the Clinical Frailty Scale

The Clinical Frailty Scale (CFS) was designed to summarise the results of a Comprehensive Geriatric Assessment. It's now commonly being used as a triage tool to make important clinical decisions, so it is imperative that it is used correctly.

#1 It's all about the baseline

If the person you are assessing is acutely unwell, score how they were 2 weeks ago, not how they are today.

#2 You must take a proper history

The CFS is an objective clinical assessment tool. Frailty must be sensed, described, and measured - not guessed.

#3 Trust, but verify

What the person you are assessing says is important, but should be cross-referenced with family/carers. **The CFS is a judgement-based tool**, so you must integrate what you are told, what you observe, and what your professional clinical experience tells you from dealing with older adults

#4 Over-65s only

The CFS is not validated in people under 65 years of age, or those with stable single-system disabilities. However, documenting how the person moves, functions, and has felt about their health may help to create an individualised frailty assessment.

#5 Terminally ill (CFS 9)

For people who appear very close to death, the current state (i.e. that they are dying) trumps the baseline state.

#6

Having medical problems does not automatically increase the score to CFS 3

A person who isn't bothered by symptoms and whose condition(s) doesn't limit their lives can be CFS 1 or 2 if they're active and independent.

#7

Don't forget "vulnerable" (CFS 4)

People in this category are not dependent (though they may need assistance with heavy housework), but often complain of "slowing down". They're becoming sedentary, with poor symptom control.

#8

Dementia doesn't limit use of the CFS

Decline in function in people living with dementia follows a pattern similar to frailty: mild, moderate and severe dementia generally map to CFS 5, 6 and 7 respectively. If you don't know the stage of dementia, follow the standard CFS scoring.

#9

Drill down into changes in function

When considering more complex activities of daily living (such as cooking, managing finances, and running the home) the focus is on *change* in function. A person who has always relied on someone else to perform a particular activity should not be considered dependent for that activity if they've never had to do it before and may not know how.

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Table 2 Secondary outcomes according to frailty, Edmonton Frail and Clinical Frailty Scales

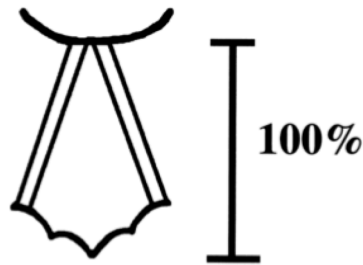
Variable	Edmonton Frail Scale		Clinical Frailty Scale		Univariate regression model Estimate (95% CI)		Multivariate regression model Estimate (95% CI)	
	Frail <i>n</i> = 52	Not frail <i>n</i> = 166	Frail <i>n</i> = 61	Not frail <i>n</i> = 157	Edmonton Frail Scale	Clinical Frailty Scale	Edmonton Frail Scale	Clinical Frailty Scale
Mortality within 30 days	5 (9.6%)	3 (1.8%)	5 (8.2%)	3 (1.9%)	5.41 (1.36 to 21.47)	4.30 (1.09 to 16.98)	5.26 (1.28 to 21.62)	4.01 (0.91 to 17.73)
Mortality at six-month follow-up	16 (30.8%)	17 (10.5%)	17 (27.9%)	16 (10.5%)	3.76 (1.75 to 8.07)	3.28 (1.54 to 6.96)	2.86 (1.25 to 6.51)	2.16 (0.94 to 4.97)
Any complication*	29 (55.8%)	39 (23.5%)	28 (45.9%)	40 (25.5%)	4.05 (2.18 to 7.75)	2.47 (1.34 to 4.56)	3.67 (1.84 to 7.30)	2.33 (1.18 to 4.61)
Acute myocardial infarction	2 (3.8%)	2 (1.2%)	2 (3.3%)	2 (1.3%)	3.26 (0.55 to 19.34)	2.61 (0.44 to 15.47)	1.95 (0.27 to 14.10)	0.94 (0.13 to 6.54)
Reintubation	5 (9.6%)	1 (0.6%)	4 (6.6%)	2 (1.3%)	12.78 (2.04 to 79.96)	4.87 (1.01 to 23.52)	8.25 (1.22 to 55.53)	3.54 (0.62 to 20.32)
Acute pulmonary edema	9 (17.3%)	8 (4.8%)	7 (11.5%)	10 (6.4%)	4.07 (1.52 to 10.90)	1.93 (0.72 to 5.19)	4.44 (1.55 to 12.68)	1.90 (0.63 to 5.69)
Pulmonary embolus	0 (0.0%)	2 (1.2%)	0 (0.0%)	2 (1.3%)	0.63 (0.03 to 13.26)	0.51 (0.02 to 10.69)	0.36 (0.01 to 20.18)	0.22 (0.00 to 13.81)
Stroke/Transient ischemic attack	0 (0.0%)	4 (2.4%)	0 (0.0%)	4 (2.5%)	0.34 (0.02 to 6.49)	0.28 (0.01 to 5.23)	0.31 (0.02 to 5.11)	0.28 (0.02 to 4.98)
Wound infection	10 (19.2%)	8 (4.8%)	10 (16.4%)	8 (5.1%)	4.61 (1.75 to 12.10)	3.59 (1.38 to 9.35)	1.52 (0.52 to 2.52)	1.41 (0.38 to 2.45)
Acute kidney injury	8 (15.4%)	20 (12.0%)	10 (16.4%)	18 (11.5%)	1.37 (0.57 to 3.25)	1.54 (0.68 to 3.50)	1.26 (0.50 to 3.14)	1.59 (0.64 to 3.93)
Unplanned reoperation	11 (21.2%)	7 (4.2%)	10 (16.4%)	8 (5.1%)	5.89 (2.21 to 15.72)	3.59 (1.38 to 9.35)	6.20 (2.09 to 18.38)	4.37 (1.47 to 13.02)
Unplanned admission to ICU	13 (25.0%)	12 (7.2%)	13 (21.3%)	12 (7.6%)	4.22 (1.81 to 9.83)	3.24 (1.41 to 7.47)	4.54 (1.83 to 11.26)	3.70 (1.46 to 9.41)
Hospital length of stay (days)	9.0 [5.0–14.6]	3.0 [1.0–9.0]	8.0 [5.0–14.0]	3.0 [1.0–9.0]	6.00 (3.15 to 8.85)	5.00 (2.88 to 7.12)	2.97 (-0.35 to 6.29)	2.52 (-0.66 to 5.69)
Other major complications	13 (25.0%)	21 (12.7%)	13 (21.3%)	21 (13.4%)	2.31 (1.08 to 4.98)	1.77 (0.83 to 3.76)	1.95 (0.86 to 4.43)	1.69 (0.73 to 3.93)
Discharge location								
Home	25 (48.1%)	122 (73.5%)	29 (47.5%)	118 (75.2%)	Ref.	Ref.	Ref.	Ref.
Assisted living facility/ Rehabilitation	17 (32.7%)	29 (17.5%)	23 (37.7%)	23 (14.7%)	2.86 (1.37 to 5.98)	4.07 (2.01 to 8.25)	1.92 (0.81 to 4.55)	2.66 (1.15 to 6.13)
Other acute hospital	6 (11.5%)	12 (7.2%)	5 (8.2%)	13 (8.3%)	2.44 (0.84 to 7.12)	1.56 (0.52 to 4.74)	2.20 (0.68 to 7.15)	1.10 (0.31 to 3.91)
Died in hospital	4 (7.7%)	3 (1.8%)	4 (6.6%)	3 (1.9%)	6.51 (1.37 to 30.89)	5.43 (1.15 to 25.59)	6.49 (1.25 to 33.79)	5.02 (0.92 to 27.51)

* Defined as at least one of the following: acute myocardial infarction, cardiac arrest, tracheal reintubation, acute pulmonary edema, deep venous thrombosis, pulmonary embolus, stroke, wound infection, acute kidney injury, unplanned need for reoperation, unplanned admission to intensive care unit (ICU).

Values are expressed as median [interquartile range], *n* (%). Estimates are odds ratio (95% confidence interval [CI]), with the exception of the estimates for hospital length of stay (median difference [95% CI]) and the estimates for discharge location (relative risk ratio [95% CI]).

Section C: The Percentage of Glottic Opening Score (POGO)

1. As per the title, the POGO is self-explanatory. A score of 100 represents full visualization from the anterior commissure of the vocal cords to the interarytenoid notch between the posterior cartilages
2. In general, a CL 1 view will correspond with a 100% POGO score, CL2A with a 50 % POGO score, and CL3-4 collectively with a 0% POGO score






Fremantle score component			Comparison scores
View	F (full)		CL grade 1 POGO 100%
	P (partial)		CL grade 2a POGO 50%
	N (none)		CL grade 3 POGO 0%
Ease	1 - Easy	TT passed first time using manufactures technique	
	2 - Modified	TT passed with more than 1 attempt or a modified technique or adjunct used	
	3 – Unachievable	Unable to pass TT	
Device		Name of the device and blade used	

Figure 1 Components of Fremantle score with Cormack and Lehane (CL) and percentage of glottic opening (POGO) score equivalents. TT, tracheal tube.