

PROTOCOL GIFT CRITERIA IMPLEMENTATION FOR DECEASED ORGAN DONATION





DR ABDUL GHANI BIN ABDUL JALIL
Director
National Transplant Resource Center

FOREWORD

BY DIRECTOR OF NATIONAL TRANSPLANT RESOURCE CENTER

I am thrilled to introduce this significant publication, "Protocol GIFT Criteria Implementation for Deceased Organ Donation," which plays a crucial role in advancing early detection and referral guidelines. As the Director of the National Transplant Resource Center, I am privileged to be part of this remarkable journey, marking the culmination of dedicated efforts in the realm of organ transplantation. This book not only underscores the collaborative spirit of our healthcare community but also serves as a cornerstone in our ongoing mission to elevate organ transplantation practices in Malaysia.

Organ transplantation is a symphony composed of humanity's most exceptional qualities – courage, generosity, innovation, and compassion. By enabling organ donation, we bridge the gap between life and a renewed life, transforming personal tragedy into a triumph over illness. Within this profound context, the "Protocol GIFT Criteria Implementation for Deceased Organ Donation" emerges as a guiding light, illuminating a path towards a more effective, fair, and compassionate approach to organ transplantation.

In the diverse landscape of healthcare, time is an invaluable resource, particularly in the domain of organ transplantation. Every moment holds significance, and the timely nature of interventions can determine the difference between life and loss. Thus, the significance of early referral in hospital settings for organ donation cannot be overstated. This book not only offers comprehensive guidance but also issues a resounding call to action, encouraging healthcare providers to embrace a culture of early referral for organ donation.

Having overseen the National Transplant Resource Centre, I have witnessed the unwavering dedication of individuals who have pooled their expertise to create a comprehensive guide that transcends boundaries, setting new standards of excellence.

In closing, "Protocol GIFT Criteria Implementation for Deceased Organ Donation" stands as an essential achievement that is poised to shape the future of organ transplantation in Malaysia and beyond. I extend my deepest gratitude to all those who have contributed to this vital work. My hope is that the insights contained within these pages will ignite lasting change and progress as we continue our shared mission of saving lives through organ transplantation.

He is the One' Who created death and life in order to test which of you is best in deeds. And He is the Almighty, All-Forgiving. (Al-Mulk: 2)

CHIEF EDITOR

DR ENGKU EMILA BINTI ENGKU AWANG

CLINICAL COORDINATOOR (MMC 61183)
NATIONAL TRANSPLANT RESOURCE CENTER

CONTRIBUTORS

DR HASDY BIN HARON

MBBS(IIUM), MSC DONATION & TRANSPLANTATION (BARCELONA), (MPM:47508)

NATIONAL ORGAN DONATION CLINICAL MANAGER

NATIONAL TRANSPLANT RESOURCE CENTER

DR NURUL AMIRA BINTI ZAIMY

MEDICAL OFFICER (MMC 73528)
DONOR COORDINATOR UNIT PEROLEHAN ORGAN
HOSPITAL SULTAN IDRIS SHAH

DR ZAIDANI EKRAM ATTAMIMI

CLINICAL COORDINATOOR (MMC 58685)
NATIONAL TRANSPLANT RESOURCE CENTER

DR MUHAMMAD SAIFUL ASYRAFF BIN MARZUKHI

CLINICAL COORDINATOOR (MMC 680560)
NATIONAL TRANSPLANT RESOURCE CENTER

DR MUHAMMAD SALMAN BIN MUHAMMAD ZAIM

CLINICAL COORDINATOOR (MMC 87549)
NATIONAL TRANSPLANT RESOURCE CENTER

MAZNI BINTI AHMAD

NURSE SUPERVISOR (PENYELIA JURURAWAT, LJM 29334) NATIONAL TRANSPLANT RESOURCE CENTER

MOHAMAD ALIFF BIN ABDULLAH

CLINICAL COORDINATOOR (LJM 122295)
NATIONAL TRANSPLANT RESOURCE CENTER

TENGKU MOHAMAD NAZRONI ZAFRAN BIN TENGKU MOHD NADZRI

CLINICAL COORDINATOOR (APC 17793)
NATIONAL TRANSPLANT RESOURCE CENTER

Contents

6.

Reference

No.	Title	Pages
1.	Introduction	1
2.	Objective	2
3.	Scope	3
4.	Definitions	4
5.	Work Instruction	
	 Stage 1 – Introduction to GIFT protocol by UPOH and TOP team to relevant healthcare staff. 	7
	 Stage 2 – GIFT criteria data collection (Numbers of potential brain death - referred to UPOH and TOP hospital). 	10
	Stage 3 - Data Audit & Reporting (Monthly report to be submitted to Hospital & audit meeting conducted by hospital to analyse the data).	11

13

Protocol for G.I.F.T Criteria Implementation to Improve Deceased Organ Donor Identification in Malaysia

1.0 Introduction

In a world where medical advancements have made remarkable strides, there still exists a heart breaking reality—thousands of individuals are languishing on waiting lists, hoping for the gift of life through organ and tissue transplantation. As we delve into the pages of this book, we confront the sobering truth that until July 2023 alone, over 9,000 patients find themselves on the precipice of life and death, awaiting the opportunity for a new lease of life. The National Transplant Resource Centre, an authority on the subject matter, reveals that since 1975, a mere 830 patients have received organs from deceased donors. This glaring disparity between demand and supply serves as a haunting reminder that each passing day brings suffering and tragedy for those affected by the lack of available organs and tissues. It is a reality that forces us to confront the urgency and importance of the organ donation cause. However, amidst the sombre statistics lies a glimmer of hope. Organ and tissue donation has the power to transform lives, offering recipients the chance for a better quality of life and the opportunity to embrace a future they thought would forever remain out of reach. One individual's organ and tissue donation can help numerous lives.

Furthermore, there is evidence that renal transplantation from a deceased donor is cost-effective treatment when compared with dialysis for adult with end stage renal disease. ¹⁰ But the transplant can only happen if there is donor. And to get a large pool of donor, the detection must start as early as during admission to ED. ⁷

The Protocol for Identification and Referral of Potential Organ Donors in Malaysia, also known as the GIFT criteria, aims to establish a systematic approach for the identification and referral of potential brain dead donors. This protocol is designed to ensure consistency and efficiency in identifying potential donors and referring them to UPOH/TOP team for further evaluation and management. The "G.I.F.T" criteria are no stranger to donor coordinators in Malaysia, however this criterion is not extensively used by other departments as the first step of identification and referral to the hospital donor coordinator. To facilitate the attending staff in identifying a possible patient, the "G.I.F.T" criteria should be extensively used in ED.

The potential donor referral previously will be decided by the primary team doctors and usually happens when the patient has already been admitted to the ward. This can delay the starting of donor maintenance and subsequently affect the organs quality. This approach for identifying potential donors as early as possible if either of the following criteria are met.⁷ Referral of potential organ donors from the ED is associated with an increased likelihood of successful organ retrieval compared with the inpatient setting.⁶

The following documents the approach taken to the implementation of a clinical trigger for organ donation.

- G GCS 3/15
- I Intubated & Ventilated
- F Fixed & Dilated Pupils
- T Treatment is futile

Knowledge without action is wastefulness and action without knowledge is foolishness.

Al- Ghazali

2.0 Objective

- 2.1 To establish standardized guidelines and efficient approach for detection of potential donors in Malaysia, based on the GIFT criteria.
- 2.2 To ensure a consistent and ethical approach in identifying suitable donors for transplantation.¹
- 2.3 Developing collaboration and teamwork between healthcare professionals (primary team) and organ donation coordinators (UPOH/TOP hospital) is crucial for the success of organ transplantation programs.
- 2.4 To increase the donor pool from brain dead patients in critical areas and ultimately increasing the number of organs available for transplantation and saving more lives.⁸
- 2.5 To reduce the missed donor opportunities resulted from non-referral of potential deceased donor.⁹
- 2.6 To ensure equitable access and maximize opportunities for family members of potential deceased organ donors make informed decisions regarding organ donation.⁵
- 2.7 To implement strategies that enhance the efficiency and effectiveness of the organ donation pathway.

3.0 Scope

 This protocol applies to all healthcare professionals (UPOH/ TOP team members and primary team in critical areas) involved in the detection and management of potential organ donors within all 16 focus hospitals in Malaysia.

There are no incurable diseases — only the lack of will. There are no worthless herbs — only the lack of knowledge.

Avicenna

4.0 Definitions:

a. GIFT Criteria:

Clinical criteria to define potential brain death organ donor

b. National Transplant Resource Center:

The designated organization responsible for coordinating the retrieval and allocation of organs for transplantation.

c. Unit Perolehan Organ Hospital (UPOH):

The designated unit with full time medical staff for potential donor detection in the hospital.

d. Tissue Organ Procurement (TOP) team:

The designated unit with part-time medical staff for potential organ detection in hospitals.

5.0 Work Instruction

A three phase approach to implementation was planned.

- **Stage 1** Introduction to GIFT protocol by UPOH and TOP team to relevant healthcare staff.
- Stage 2 GIFT criteria data collection (Numbers of potential brain death referred to UPOH and TOP hospital).
- **Stage 3** Data Audit & Reporting (Monthly report to be submitted to Hospital & audit meeting conducted by hospital to analyse the data).

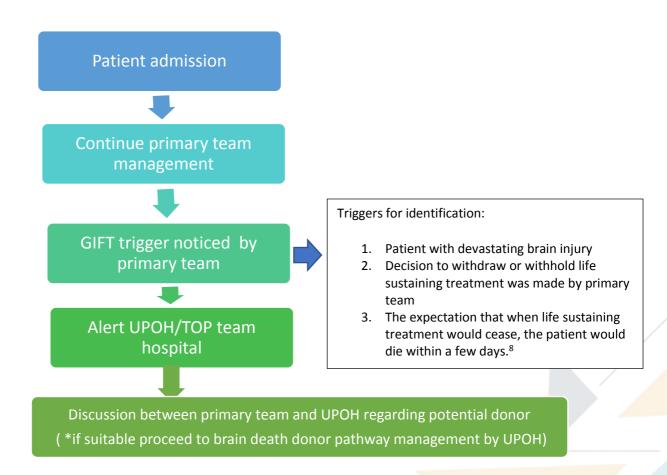


Chart 1. Workflow of GIFT criteria.

Stage 1: Introduction to GIFT protocol by UPOH and TOP team to relevant healthcare staff

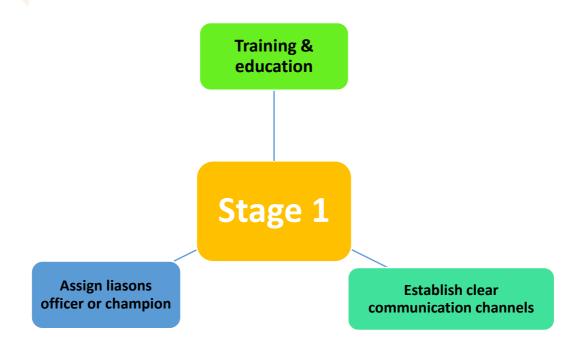


Chart 2. Introduction of GIFT criteria to hospital staff

Training and Education

Healthcare professionals involved in the identification and referral process should receive appropriate training and education on the GIFT criteria and organ donation procedures. This includes training on communication skills, ethical considerations, and legal requirements related to organ donation. Promote interdisciplinary education and training.⁸

Method delivery of education presentations for the GIFT trigger including:

One on one education

- · Group education
- Power points presentations

Posters - non-patient areas

- · Lanyard cards give to staff
- Emails
- Departmental champions

Goals:

- i) Clinical Trigger ED
 - Aim >80% of patients meeting the ED Clinical GIFT Trigger are referred to ICU and notified to UPOH/TOP team.
 - >80% of ED staff receive education and support for the implementation of ED clinical triggers.
 - Education: Number of sessions and participants recorded. Session evaluations completed and reported monthly to UPOH/TOP team.

ii) Clinical Trigger ICU

- Aim >80% of patients meeting the ICU Clinical GIFT Trigger are considered for donation by the UPOH/ TOP team and this consideration documented in the medical record.
- >80% of ICU staff receive education and support for the implementation of ICU clinical triggers.
- Education: Number of sessions and participants recorded. Session evaluations completed and reported monthly to UPOH/TOP team.

Assign liaisons officers or champion

Designate specific individuals from each team as liaisons or coordinators. Identify relevant staff for example medical staff from ED, ICU, Neurosurgery and Medicine, Nursing staff from ED, ICU, HDW, Neuro ICU. 12, 13

These individuals will serve as points of contact, facilitating communication, and collaboration between the teams. They can also address any issues or conflicts that may arise.

Establish clear communication channels - UPOH Link or whatsapp group

- Recognize and appreciate the contributions of each team member. Foster trust by promoting open and honest communication, encourage collaborative problem-solving.
- Consistent presence of organ donation staff in both ED and ICU.

•

Stage 2 – GIFT criteria data collection (Numbers of potential brain death - referred to UPOH and TOP hospital).

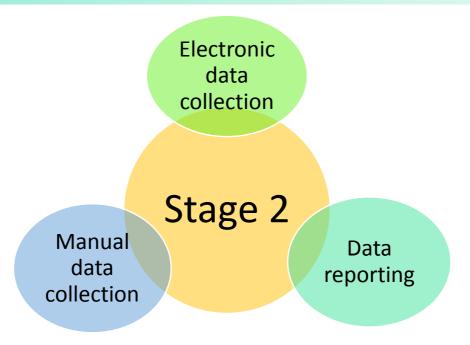


Chart 3. Method of data collection.

By implementing a structured data collection process, collection the number of potential brain death cases referred to UPOH and the subsequent transfers to NTRC. This data will provide valuable insights for evaluating and improving the organ donation pathway.

- a. **Manual data collection**: Primary hospital coordinators and UPOH team members can maintain a record of potential brain death cases and update it regularly.
- b. **Electronic record systems**: Utilize electronic health record systems or dedicated databases to track and document potential brain death cases, and referrals.
- c. **Data reporting forms**: Develop standardized forms for UPOH/TOP team hospital to report the number of potential brain death cases to NTRC.

Stage 3 - Data Audit & Reporting (Monthly report to be submitted to Hospital & Audit Meeting Conducted by Hospital to Analyse the Data)



Chart 4. Data Audit & Reporting

Continuous Quality Improvement

Regular reviews and audits of the protocol should be conducted to identify any gaps or areas for improvement. Feedback from healthcare professionals, organ donation coordinators, and transplant centres should be actively sought to refine the protocol and enhance the overall effectiveness of the organ donation process.

- **a. Regular Audit**: Periodic audits should be conducted to assess compliance with the protocol and identify areas for improvement.
- **b. Continuous Education**: Regular educational programs should be provided to healthcare professionals involved in the evaluation process to ensure their understanding of the GIFT criteria and protocol.
- **c. Outcome Monitoring**: Monitor the outcomes of organ transplantation procedures to evaluate the effectiveness of the GIFT criteria in achieving successful transplants.

No	Instruction	Responsibility	
PRE-DONATION			
1.	Identification Process		
	The identification process involves the following: a. Primary team members, including physicians, nurses, and organ donation coordinators, should be trained to identify potential organ donors based on the GIFT criteria. GIFT criteria should be reminded in critical care areas, in the form of tent card, sticker.	Doctor / Nurses Coordinator UPOH	
2.	Referral Process		
	Once a patient has fulfilled gift criteria. The attending healthcare professional should immediately notify the designated organ donation coordinator or specialist. b. The organ donation coordinator or specialist should be responsible for coordinating the evaluation and management of the potential donor, including the necessary tests and assessments to determine organ suitability. c. The coordinator should contact the appropriate transplant centers to inform them of the potential donor and discuss organ allocation based on the urgency and compatibility of the recipients. d. The coordinator should ensure timely communication between the healthcare team, the potential donor's family, and the transplant centers, providing updates on the progress of the evaluation and organ allocation process.	Doctor and Coordinator	

Whoever says that all music is prohibited. Let him also claim that songs of birds can prohibited

Al- Ghazali

6.0 References

- 1. National Organ, Tissue and Cell Transplantation Policy, Ministry of Health Malaysia, 2007.
- 2. Akta Tisu Manusia, 1974.
- 3. Organ Donation Manual, Ministry of Health Malaysia.
- Consensus Statement on Brain Death 2003 (Malaysian Society of Neurosciences, Ministry of Health Malaysia and Academy of Medicine of Malaysia).
- 5. MSQH Malaysian Hospital Accreditation Standards & Assessment Tool 6th Edition 2021 Version 1.1 Service Standard 27: Standards For Deceased Organ And Tissue Donation And Promotion.
- 6. Michael GE, O'Connor RE. The importance of emergency medicine in organ donation: Successful donation is more likely when potential donors are referred from the emergency department. Academy Emergency Med. September, 2009 Sep; 16(9): 850-8. doi:10.1111/j.1553-2712.2009.00472.x. Epub 2009 Aug 10. PMID: 19673710.
- Budoy D, Rodriguez-Villar C, Peña D. Effect of Active and Early Possible Organ and Tissue Donor Detection in the Emergency Room in a University Hospital. Transplant Proceeding. November, 2019. https://doi.org/10.1016/j.transproceed.2019.08.022
- 8. Witjes M, Kotsopoulos AMM, Otterspoor L. The Implementation of a Multidisciplinary Approach for Potential Organ Donors in the Emergency Department. Transplantation. November, 2019; 103(11):2359-2365. Doi: 10.1097/TP.000000000000000701. PMID: 30893291.
- 9. McCallum J, Ellis B, Dhanani S, Stiell IG. Solid organ donation from the emergency department A systematic review. CJEM. 2019 Sep;21(5):626-637. doi:10.1017/cem.2019.365. PMID: 31368431.
- 10.Fu R, Sekercioglu N, Berta W, Coyte PC. Cost-effectiveness of Deceased-donor Renal Transplant Versus Dialysis to Treat End-stage Renal Disease: A Systematic Review. Transplant Direct. January, 2021. 13;6(2):e522.
- 11. Sunita B, Yok C, Ghazali A. The Cost and Utility of Renal Transplantation in Malaysia. Malaysia, November 2015. doi: 10.1097/TXD.000000000000553
- 12.Pematuhan Kepada Pekeliling Ketua Pengarah Kesihatan Bilangan 5/2019: Pengukuhan Tadbir Urus Perkhidmatan Perolehan Organ dan Tisu Kementerian Kesihatan Malaysia. 2023, Putrajaya (KKM.600-27/112/22 Jld. 2 (19)).
- 13. Surat Pekeliling Ketua Pengarah Kesihatan Malaysia Bilangan 5/2019: Pengukuhan Tadbir Urus Perkhidmatan Perolehan Organ Dan Tisu Kementerian Kesihatan Malaysia. 2019, Putrajaya (KKM600-27/11/2 Jld 3(33)).