

# Improvement Guide



## DCD Procurement Collaborative

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## Preface

This Improvement Guide has been developed in conjunction with the OPTN Donation after Circulatory Death (DCD) Procurement Collaborative. This collaborative improvement project aims to support efforts to increase organs available for transplant by identifying and sharing effective practices regarding approaches to DCD procurement with a cohort of Organ Procurement Organizations (OPOs). Many OPOs have successfully increased DCD volumes while maintaining or increasing Donation after Brain Death (DBD) volumes. Several Practice Model OPOs (PMOs) were identified and studied in order to develop this Improvement Guide, which reflects learnings and understandings of key effective practices.

Three key drivers to success were identified: optimizing clinical practices and staffing structures, strengthening donor hospital and transplant program relationships, and increasing the number of approaches for authorizations. While these drivers are not the only ones organizations can address to improve and grow their DCD procurement volumes, they emerged as important contributors to this desired effort.

To best utilize the interventions and changes, organizations should ...

**1. Examine your process.** Identify the key roles and responsibilities in your process from outreach and referrals to authorization, donor management, and procurement. Host and facilitate a process mapping session, document your work processes, and validate them with your team.

**2. Identify opportunities for improvement.** Analyze your process map and look for ambiguous or problem areas. Review your baseline data – what information indicates an area for improvement?

**3. Plan small tests of change.** Use the interventions to identify the changes best suited for your organization to test. It is best practice to start with small tests of change. For example, draft and test a protocol with one person in one setting. Write down questions you want to answer, and collect data through process measures or observation.

**4. Test changes and analyze your results.** What have you learned from testing your intervention? Decide to adapt, adopt, or abandon the change. Continue testing and use your analyses to determine whether the changes or interventions are resulting in improvements within your populations.

**5. Implement improvements.** When you are ready, develop a plan for implementing a tested, proven change within your transplant program. Decide who will be responsible for communicating, tracking, and ensuring sustainability of improvement.

***Disclaimer: Use of this Improvement Guide does not does not guarantee compliance with OPTN policies, bylaws, or obligations.***

# Improvement Guide Overview

## Change Concept 1: Optimize clinical practices and staffing structures

Developing clear and comprehensive clinical protocols and practices are essential for DCD procurement success. Evaluating and defining suitable DCD donor criteria is integral to the process of establishing effective practices in this improvement area. Redefining and perhaps broadening clinical criteria can lead to more donation opportunities.

Developing a staffing structure that works for your organization and donor hospitals is also a key to success. Adaptable staffing structures with robust staff recruitment and training can contribute to overall efficiencies and productivity. Evaluation of processes is always important for organizational improvement and therefore establishing a routine review of OPO data and metrics provides great benefit.

## Change Concept 2: Strengthen donor hospital and transplant program relationships

Maintaining strong relationships with both donor hospitals and local transplant programs is critical for obtaining referrals, maximizing donor potential, and ensuring use of viable organs. A trusting relationship between OPOs, donor hospitals, and transplant programs helps develop confidence in the organ procurement organization and the organ donation process.

Identifying ways to build these community relationships is essential. Outreach and education are integral to this effort and can be conducted with front line donor hospital staff, donor hospital administrators, and transplant surgeons. Communication and trust are core components of strong relationships so sharing information with donor hospitals on aggregate donor recovery data as well as outcomes of specific donor cases can be beneficial and provide motivation for continued engagement.

## Change Concept 3: Enhancing the process for obtaining authorizations

Having established processes for approaching families for authorization is vital in the effort to increase DCD donors. Providing support to families and addressing their needs and wishes as well as those of their loved ones can be difficult and proper training of staff members is crucial.

Strategizing and developing effective methods to engage with donor hospital staff and families is important, from identifying who should be involved, when discussions should take place, what information should be included, and how best to provide support to families. Developing standards for family approach, authorization, and support is essential to the entire process.

## Change Concept 1: Optimize Clinical Practices and Staffing Structures



### Intervention 1: Broaden your criteria for a suitable DCD donor

OPOs may want to routinely review and evaluate their current suitable DCD donor criteria. If the criteria is too limiting appropriate donors may be missed.



#### Recommended actions

1. Review OPO DCD practices and criteria to consider broadening
  - a. Age, medical history, neuro status, warm ischemia time limits, etc.
  - b. Work with your local and non-local transplant centers to do this
2. Revise criteria as appropriate and continually review for relevance
3. Educate your staff on criteria



#### Suggested measures

- Track the number of non-arrests (approached and did not reach asystole within timeframe)
- Track the number of unexpected arrests (did not approach for DCD but did reach asystole within timeframe)
- Review data on donor suitability to ensure compliance with donor criteria



#### Resources

CENTER	TOOL
MAOB	<a href="#">Automatic Heartbeating Referral Rule Outs by OCCs</a>
WALC	<a href="#">Donation Referral Process</a>

## Change Concept 1: Optimize Clinical Practices and Staffing Structures



### Intervention 2: Clearly define clinical practices and process flows

OPOs should have clear standards for referrals and consistent application of those processes to all donor hospitals. Review the processes/policies on a regular basis to ensure that practices are most efficient and effective for obtaining and responding to donor referrals.



### Recommended actions

1. Define “timely referrals” and ensure donor hospitals are aware of OPO expectations
2. Determine a plan for following referrals
  - a. When to contact donor hospital
  - b. How often you are contacting
  - c. What may require an early review
  - d. When to go on-site
3. Develop a DCD decision-making tree/process flow and define who will make the final decision on who will make the final decision on whether or not to approach for DCD
4. Review and update all other DCD policies and process flows



### Suggested measures

- Track the number of referrals from each donor hospital
- Track the timeliness of donor hospital referrals
- Determine and track the time between referral and OPO staff’s initial case review



### Resources

CENTER	TOOL	CENTER	TOOL
AZOB	<a href="#">DCD Definition and Declaration</a>	MAOB	<a href="#">DCD Communication and Education</a>
AZOB	<a href="#">DCD ICU Checklist</a>	MAOB	<a href="#">DCD Donor On Site Checklist</a>
AZOB	<a href="#">DCD OR Checklist</a>	MAOB	<a href="#">Expedited Organ Screen</a>
AZOB	<a href="#">Withdrawal Checklist</a>	MAOB	<a href="#">Full Organ Screen</a>
AZOB	<a href="#">Organ DCD Standard Operating Procedures</a>	MAOB	<a href="#">OCC Template</a>
PADV	<a href="#">DCD Checklist Sample 3</a>	MAOB	<a href="#">Open Referrals Algorithm</a>
WALC	<a href="#">Critical Pathway for DCD Flowchart</a>	MAOB	<a href="#">Ventilator Auto Triggering Decision Tree</a>
WALC	<a href="#">Donation After Circulatory Arrest Process Flowchart</a>	MAOB	<a href="#">OCC Pre-Recovery Worksheet</a>

## Change Concept 1: Optimize Clinical Practices and Staffing Structures



### *Intervention 3: Develop a flexible staffing structure and set expectation of roles*

Establish a solid team approach. This will ensure that each staff person knows his or her role and the roles of the rest of the members of the team. Ensure staffing flexibility in order to allow for rapid mobilization of teams. Consider modifying the OPO staff structure within large donor hospitals.



#### Recommended actions

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1. Define “timely response” to referrals for OPO staff
2. Set expectations for OPO team for rapid mobilization
3. Set and communicate expectations for procurement team
  - a. When to arrive, how long to wait (expiration), etc.
4. Establish consistent teams for hospitals/determine staff presence in donor hospitals
5. Establish outreach and education with the Medical Examiner/Coroner’s offices



#### Suggested measures

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- Track progress with Medical Examiner/Coroner cases



#### Resources

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##### **CENTER**

MAOB

##### **TOOL**

[DCD Roles ICU Extubation](#)

## Change Concept 2: Strengthen Donor Hospital and Transplant Program Relationships



### *Intervention 1: Perform outreach with local transplant programs and surgeons*

Work with your local transplant programs and surgeons to better understand trending acceptance practices.



### Recommended actions

1. Establish regular data reviews with transplant programs
2. Assess criteria for potential use/acceptance of DCD organs at each transplant program
  - a. If transplant centers are using a third party screening service, ask to see the algorithm they use as a reference when screening offers
3. Review outcome data of organs that were declined by the respective program and utilized elsewhere



### Suggested measures

- Track the number of DCD organs that meet transplant program criteria that were transplanted/discarded
- Track adherence to established cadence of OPO/transplant program meetings
- Stratify acceptance behaviors by surgeons, third party screening services, etc. as well as weekday vs. weekend
- Track organs offered and declined locally but transplanted elsewhere



## Change Concept 2: Strengthen Donor Hospital and Transplant Program Relationships



### Intervention 2: Perform outreach with donor hospitals and provide training

Ensuring that donor hospital staff are well-informed on clinical triggers and donation processes is vital to improving timely referral rates. Educate all relevant units in the hospital, focusing on ICU's and ED.



### Recommended actions

1. Educate staff on referral types and process
2. Spread a consistent message of triggers (clinical and non-clinical)
3. Define the process from referral to follow-up and set expectations for open communication
4. Communicate OPO roles and structure
5. Continually assess culture and donor hospital needs
6. Review data and share feedback (timely referrals, missed opportunities, etc.)
  - a. Report data on comparable hospitals as well, blinded if necessary. Consider grouping hospitals with similar systems; trauma centers, children's hospitals, etc.



### Suggested measures

- Track education offered overall and per donor hospital
- Track and trend attendance at in-service trainings hospital to hospital
- Assess knowledge and awareness through feedback mechanisms (i.e. surveys)
- Track the number of missed opportunities (patient extubated prior to opportunity for authorization, etc.)



### Resources

CENTER	TOOL
AZOB	<a href="#">Contact Protocol</a>
AZOB	<a href="#">DCD Process Tool for Roles and Responsibilities</a>
AZOB	<a href="#">DCD Training PowerPoint</a>
AZOB	<a href="#">Hospital Debrief Survey</a>
AZOB	<a href="#">Internal Performance Action Review</a>
AZOB	<a href="#">Newsletter</a>
MAOB	<a href="#">Organ and Tissue Donation Reference Manual-DCD</a>
MAOB	<a href="#">Recovery Surgeon Orientation</a>
MAOB	<a href="#">DCD Checklist for Hospital Staff</a>

## Change Concept 2: Strengthen Donor Hospital and Transplant Program Relationships



### *Intervention 3: Support donor hospital policy development regarding DCD practices*

Collaborate and provide support in donor hospitals' development of DCD protocols and develop synergistic policies. Work to ensure that donor hospital policies align with OPO processes and key elements are included, such as who is responsible for pronouncing death.



#### Recommended actions

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1. Set up regular yearly reviews of hospitals' DCD policies
2. Compare OPO policy and donor hospital policy
3. Ensure that policies define roles and responsibilities, but are not limiting ( i.e. do not dictate location of withdrawal, etc.)
4. Communicate desire of shared goal to maximize every donation opportunity



#### Suggested measures

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- Track the number of donor hospitals whose DCD policies were reviewed by OPO staff



#### Resources

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##### CENTER

AZOB

##### TOOL

[DCD Hospital Policy Template](#)

## Change Concept 3: Enhancing the process for obtaining authorizations



### *Intervention 1: Develop the overall plan and process for family approach*

Authorization from families is an extremely delicate and difficult step for OPO staff to execute during the donation process. Early and effective communication between donor hospital staff and OPO staff can positively impact family interaction and authorization rates.



#### Recommended actions

1. Huddle with hospital staff prior to family approach discussions; utilize a collaborative approach
2. Assign one staff member/role to the donor family throughout the entire process
3. Establish staff huddle requirements with the family



#### Suggested measures

- Track the number of families who refused initially, but ultimately authorized
- Track all family conversations, but categorize as potential/non-potential by tracking time of death even after a family declines (4 categories of authorized and potential)
- Track OPO compliance with internal staff policy



#### Resources

CENTER	TOOL
MAOB	<a href="#">Family Moment of Honor in OR Template</a>
MAOB	<a href="#">Remembrance Card</a>
WALC	<a href="#">DCD What to Expect</a>

## Change Concept 3: Enhancing the process for obtaining authorizations



### *Intervention 2: Optimize the process of family approach*

The process and timing from authorization to withdrawal of support can be extremely challenging with DCD donors. It can be helpful to evaluate potential donors lost due to timing and logistic challenges and work as a team to enhance processes for future mitigation.



### Recommended actions

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1. Develop training on managing the withdrawal process and supporting families to potentially allow more time to arrange logistics
2. Provide clear communication about withdrawal of support, entire donation experience, who is involved, etc.
3. Establish clear plans in patient/donor does not deteriorate
4. Establish plans for challenges (i.e. Expedited/Rapid DCD, DBD Conversion)

\*"Rapid" should be defined based on OPO capabilities and hospital proximity. May differ OPO to OPO based on items such as having their own recovery team



### Suggested measures

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- Track the number of declines due to timing/logistics
- Track number of cases that progressed to BD
- Track number of expedited DCDs