

# Feedback, reflection and team learning for COVID-19: development of a novel clinical event debriefing tool

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The COVID-19 pandemic has created unprecedented challenges for healthcare teams. In addition to placing a complicated set of demands on governments, health systems, hospitals and individual healthcare workers, this outbreak also serves as 'an opportunity to gain important information, some of which is associated with a limited window of opportunity'.<sup>1</sup> In rapidly evolving pandemics, the imperative to improve performance creates an urgent need for what Amy Edmondson has described as 'Execution-as-Learning', a framework in which teams of front-line providers problem solve on the fly, rather than waiting for answers from leadership.<sup>2</sup> For many front-line care providers, this threat has created unique challenges, including rapidly evolving information about presentation and management of disease, surges of patients who are critically ill, shortages of personal protective equipment (PPE) and other resources and risks to personal safety. While all of us have cared for the ill and dying, and faced the fact that our actions as individuals or teams contribute to our patients' survival, many feel more personally at risk during the COVID-19 crisis. The development of solutions and innovations that come directly from front-line providers needs to be fostered. To help healthcare workers and their leaders gather and process information about teamwork, medical management and crisis resource management for COVID-19, while also providing support to colleagues, we created Debriefing In Suspected COVID-19 to Encourage Reflection & Team Learning (DISCOVER-Tool, figures 1 and 2).

Clinical event debriefing allows teams to reflect on high-risk events, identify safety threats and potential solutions and begin processing emotionally challenging events. The Debriefing In-Situ Conversation after Emergent Resuscitation Now (DISCERN) tool was initially developed for use in our paediatric emergency department (ED),<sup>3</sup> and has subsequently been modified for broader use in hospital systems.<sup>4</sup> The DISCERN tool emphasises psychological safety and creating a safe learning container, multidisciplinary participation and use of a scripted Plus-Delta debriefing methodology to assist teams in debriefing resuscitation events. By adapting the structure of the DISCERN tool to include additional elements specific to COVID-19 concerns, we created a novel clinical debriefing form specifically for COVID-19-related events.

Like DISCERN, the DISCOVER-Tool is intended to aid teams in holding a self-guided

debriefing after a clinical event. It includes scripting on how to establish a safe learning container, as well as a Plus/Delta structure to organise a 5–10 min debriefing. Because of the need to disseminate both solutions found and problems encountered in a particular clinical situation to the rest of our institution, data about the event are gathered for quality improvement purposes. Furthermore, the form specifically invites suggestions from clinical team members that can be disseminated to clinical and quality improvement leaders. With the immediate need for timely and practical solutions in mind, DISCOVER-Tool explicitly prompts discussion of logistical issues (such as PPE usage and availability), communication within and between teams, team dynamics (such as role clarity) and psychological distress specific to COVID-19. Such quality improvement conversations carry inherent legal protections in our state, but may vary in other jurisdictions. DISCOVER-Tool also provides information about how team members can self-refer for counselling if they are experiencing psychological distress, and we encourage colleagues elsewhere to point teammates to locally available resources. The form also includes instructions on how to upload data to our secure, online database, as well as how to contact our hospital's incident command centre for COVID-19; we urge teams elsewhere to consider what data collection and reporting mechanisms would be most effective in their own clinical settings.

DISCOVER-Tool can be used in several ways. A 'hot debriefing' could be conducted at the level of one episode of care for one patient, for example, that patient's time in the ED, within minutes to hours of the completion of that care. Alternatively, the tool could be used for daily postshift huddle debriefings, after the care of one or more patients with COVID-19. Additionally, it could be used for a weekly 'cold debrief' in which interconnected teams, such as ED plus intensive care unit, discuss cases in which the teams' activities intersected. In our institution, our emergency centres have used the DISCOVER-Tool for both 'hot' debriefing of single patient episodes of care as well as postshift huddles after multiple patient episodes. Our paediatric intensive care units have used it for both 'hot' and 'cold' debriefings of single episodes of care, depending on staff availability and competing patient care priorities.

We believe that structured clinical event debriefing practices, such as those using the



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DO NOT SCAN OR PUT INTO PATIENT CHART

**Texas Children’s Hospital – DISCOVER-Tool (Debriefing In Suspected COVid-19 to Encourage Reflection & Team Learning)**  
 Privileged and confidential pursuant to TX Health and Safety Sections 161.031-033, TX Occupations Code Section 160.007 and/or TRCP 192.5

ALL patients need this section completed (Fill out before patient leaves) – RN should decide with physician/APP	Place patient sticker here		Date (MM/DD/YY)	
			Time event ended (e.g. “time of death” or time of disposition to other level of care) _____ AM/PM	
	Physician Team Lead (Last, First)		Primary Nurse (Last, First)	
	<b>Event type</b> <input type="checkbox"/> Evaluation of stable patient <input type="checkbox"/> High-risk respiratory event <input type="checkbox"/> Escalation of therapy <input type="checkbox"/> Cardiac arrest <input type="checkbox"/> Behavioral/Restraint event <input type="checkbox"/> Other (please specify): _____ <input type="checkbox"/> Attending a delivery		<b>Interventions</b> <input type="checkbox"/> Nebulized medication <input type="checkbox"/> BiPAP/CPAP <input type="checkbox"/> PPV via bag & mask <input type="checkbox"/> Intubation <input type="checkbox"/> Chest compressions <input type="checkbox"/> Defibrillation <input type="checkbox"/> Other: _____	
<b>Viral testing status</b> <input type="checkbox"/> Suspected COVID-19 <input type="checkbox"/> Confirmed COVID-19 <input type="checkbox"/> Other (please specify): _____		<b>Patient outcome</b> <input type="checkbox"/> Admit (if not already) <input type="checkbox"/> Discharge home <input type="checkbox"/> Remain in current unit <input type="checkbox"/> Expired <input type="checkbox"/> Transfer to higher level of care		
<b>If team leader and primary nurse together decide not to do a debriefing, state reasoning (skip if doing debriefing)</b> <input type="checkbox"/> Too many urgent patient care issues <input type="checkbox"/> Did not feel it was needed <input type="checkbox"/> Other (please specify): _____				
Fill out this section only if debriefing	<b>Personnel present (during debriefing)</b> <input type="checkbox"/> Primary attending physician <input type="checkbox"/> APP (NP or PA) <input type="checkbox"/> PCA/Tech/EMT <input type="checkbox"/> Other attending physician <input type="checkbox"/> Bedside nurse <input type="checkbox"/> NAC/House Supervisor/other leader <input type="checkbox"/> Fellow <input type="checkbox"/> Charge nurse <input type="checkbox"/> Chaplain <input type="checkbox"/> Resident <input type="checkbox"/> Pharmacist <input type="checkbox"/> Social Worker <input type="checkbox"/> Midwife <input type="checkbox"/> Respiratory Therapist <input type="checkbox"/> Other (please specify): _____			
	Debriefing Leader Name (Last, First)		Debriefing Documenter Name (Last, First) (NOT debriefer. Can be RN, physician, APP)	
Fill out this section during the debriefing (person writing is NOT the person leading the debriefing). Write on back of form if there is not enough space.	Time debriefing started _____ AM/PM		Time debriefing ended _____ AM/PM	
	What went well during our care for the patient? (Please be specific)			
	<b>Logistics</b> (PPE, other equipment, patient flow, room readiness, etc.)			
	<b>Communication</b> (within and between teams, in and out of room, clarity of orders, etc.)			
	<b>Team roles &amp; responsibilities</b> (role clarity, appropriate #s in room, were multiple teams involved?)			
	What could have gone better? (ADD potential solutions below)			
	<b>Logistics</b> (PPE, other equipment, patient flow, room readiness, etc.)			
	<b>Communication</b> (within and between teams, in and out of room, clarity of orders, etc.)			
<b>Team roles &amp; responsibilities</b> (role clarity, appropriate #s in room, were multiple teams involved?)				
Potential solutions for improvement (Please be specific)				

Figure 1 Debriefing In Suspected COVid-19 to Encourage Reflection & Team Learning (DISCOVER-Tool) clinical event debriefing form, page 1.

### Advice for running a team debriefing

1. Pick a quiet or isolated space, if possible. Start by thanking team members for being present, and encouraging all teammates to participate.
2. State: "The purpose of debriefing is for education, quality improvement, and emotional processing. It is not a blaming session. Everyone's participation is welcome and encouraged."
3. State: "These debriefings usually take up to 10 minutes, and if you have urgent issues to attend to, you are welcome to leave at any time."
4. Begin with a reactions phase: "In one or two words, can you describe how this event made you feel?"
5. State: "Now, we will briefly review the patient's summary, and then we as an entire team can discuss what went well and what could have gone better. Please feel free to ask any questions."
6. Have team lead and/or recorder proceed with a brief summary of the patient's clinical course (<1 minute), and then proceed to the group discussion as outlined. Documenter (not person leading the debriefing) records on this form.

### Co-debriefing and debriefing process improvement

1. If using a co-debriefer, have a co-debriefing plan prior to starting the debriefing session in order to stay organized and professional.
2. Reflect after the session with your co-debriefer and/or recorder on what went well, and how to improve the debriefing process next time.
3. For further guidance on use of this tool, please contact Bram Welch-Horan (tbwelchh@texaschildrens.org)

### Employee Resources

Include institutional COVID-19 [Incident Command](#) contact information here.

Support: "We know these are challenging times for healthcare workers. We can take time now to discuss how people are feeling, and to remind teammates of counseling support that is available through our institution."

Anyone who requests referral for counseling should call the appropriate institution. Include contact information for counseling and employee [support resources](#) available through your hospital or other relevant institution here.

### Instructions for filling out this form

1. If you wish to **complete the form electronically**, please use your phone to scan the QR code below and complete the online survey.

(Insert [QR code](#) for online survey here; survey should be housed in a secure database such as RedCap)

(Insert [URL for online survey](#) here)

(Also include instructions for submitting a scanned form via [secure email](#) here, if applicable)

From DISCOVER-Tool v1.4, 4-05-20

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**Figure 2** Debriefing In Suspected COVID-19 to Encourage Reflection & Team Learning (DISCOVER-Tool) clinical event debriefing form, page 2.

DISCOVER-Tool, can be used in multiple healthcare contexts. We invite others to adapt the tool and share their work with the global medical community. In recent years, ‘virtual communities of practice’ have expanded throughout healthcare and medical education, facilitating rapid innovation and creative problem solving.<sup>5</sup> A bright spot in the otherwise bleak landscape of the COVID-19 crisis has been the growth of social media-based communities rapidly exploring problems such as translational simulation while maintaining physical distancing; the development of new workflows for high-risk clinical activities such as intubation; and educational materials for the rapid orientation of staff deployed outside of their usual clinical areas. Structured clinical event debriefing using forms such as the DISCOVER-Tool could encourage rapid learning both within and across institutions in another example of virtual communities of practice. We encourage healthcare teams to pursue ‘Execution-as-Learning’ while endeavouring to keep themselves and their patients safe in the COVID-19 era.

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