# **SUPPLEMENTAL DIGITAL CONTENT**

# **TITLE: ENABLERS AND BARRIERS TO IMPLEMENTING ICU FOLLOW-UP CLINICS AND PEER SUPPORT GROUPS FOLLOWING CRITICAL ILLNESS: THE THRIVE COLLABORATIVES**

# **AUTHORS:**

Kimberley J. Haines, Joanne McPeake, Elizabeth Hibbert, Leanne M. Boehm, Krishna Aparanji, Rita N Bakhru, Anthony Bastin, Sarah J Beesley, Lynne Beveridge, Brad W Butcher, Kelly Drumright, Tammy Eaton, Thomas Farley, Penelope Firshman, Andrew Fritschle, Clare Holdsworth, Aluko Hope, Annie Johnson, Michael T. Kenes, Babar A. Khan, Janet A. Kloos, Erin K. Kross, Pamela Mactavish, Joel Meyer, Ashley Montgomery-Yates, Howard L. Saft, Andrew Slack, Joanna Stollings, Gerald Weinhouse, Jessica Whitten, Giora Netzer, Ramona O. Hopkins, Mark E. Mikkelsen, Theodore J Iwashyna, Carla M. Sevin

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**Table E1 – Enablers to Implementation of Follow-Up Clinics**

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| Enablers – Major themes | Enablers – Sub-themes | Supporting Quotes |
| 1. Characteristics of the intervention (refers to actual intervention being implemented) | | |
| Interprofessional teamwork | Follow-up clinics are staffed by similar team members to that of the ICU, e.g., medical, nursing, physical therapy, occupational therapy, pharmacy | “We thought about our interdisciplinary team in the medical ICU.” (Participant 2) |
|  | Accessing interprofessional expertise to ensure the right staff drive meaningful outcomes for the patient | “Me, (doctor) doing a MOCA didn’t have the same appreciation of what the functional cognitive impairment would mean to an OT. So we made it more sort of a functional assessment, [to] implement tangible changes for the patient in the community.” (Participant 14) |
| Clinic design | Modeled off existing clinics in own organization, selecting the favorable components | ''Borrowed from chronic disease model and tailored to modify for our clinic.” (Participant 11) |
| Humanizing ICU survivorship | Focus on human connection (clinician to patient), patient experience and therapeutic trust | ''The contact time, the knowing how to draw out the information -- previously patients would not open up - for whatever reason they didn't feel comfortable.’' (Participant 7) |
|  | Time is required to build therapeutic trust | “I think there's something to – some kind of sweet spot about the length of time you have them in order to build that rapport and that sense of safety for them to start actually sharing some very difficult things to talk about.” (Participant 6) |
|  | Clinic staff known to patients and families from the ICU might motivate them to attend | “It's a human connection I think that really makes the difference for me, for my clinic as they know me...so if you've bonded with the family in the hospital or just shown interest then they’re going to be more motivated.” (Participant 9) |
|  | Engaging managers through emotional connection with work of clinic | “Whenever we get a chance to present anything about the clinic locally and especially to the administrators and managers, instead of making it a real ‘sciencey’ presentation, we ended up making a really touching presentation with the patient testimonial to engage people, for example, on the board of hospitals, who do provide funding.’' (Participant 12) |
| 2. Outer setting (refers to the economic, social, or political context of the organization) | | |
| Alignment of follow-up clinics to organizational priorities | Organizational motivation to reduce healthcare utilization and sepsis readmissions - more buy in power/resources | “One of our hospital’s largest foci is transitions of care. So we were able to take a spin with that...focusing on how we're going above and beyond what the hospital has in place.” (Participant 15) |
| Participation in SCCM Thrive Collaborative | Learning collaborative provides clinician peer support and motivation | “It has been monumental, it has given me a whole group I can reach out to and validate everything I'm doing.” (Participant 6) |
| 3. Inner setting (refers to social, economic, political environment through which the implementation proceeds and that will influence) | | |
| Promotion of clinic | Priming patients/families with pre education about follow-up clinics and what to expect | “We learned that we thought it was helpful that we gave them a pamphlet before they actually left the ICU...Then they're more readily able to accept this versus not having any education about what they're going to be called about.” (Participant 3) |
|  | Families as advocates of clinic | “...they often advocate even before I've even spoken to the patient, they haven’t even had a chance to consent to coming to the clinic. But they’re coming to the clinic because mother, husband, wife, wants them to.” (Participant 8) |
|  | Sought multi-disciplinary buy-in by making a personal connection about ICU with others in own hospital | “There was more and more buy-in, so it became multidisciplinary very quickly...they'd be like, I knew somebody that – oh, my grandmother, my brother, my daughter. So it was that personal connection…” (Participant 1) |
| Obtaining funding | Successful patient outcomes from the clinic used to help secure funding | “…you go and take the story of the patient and how the clinic helped them out...to somehow utilize them to somehow motivate the hierarchy in the hospital continue to sustain the program.” (Participant 7) |
|  | Being savvy about securing funding within existing organizational structures | “I figured out earlier in mine was that there wasn’t a lot of funding for post-ICU care if you called it that. But if you didn’t call it that, people were more willing to pay for things.” (Participant 4) |
| 4. Characteristics of individuals (refers to the people who play an important role in implementation) | | |
| Motivated clinicians | Motivated transdisciplinary staff who volunteer their time, and adopt a pioneering attitude | “Since we had no funding, with no support other than we want to do it, let's try.” (Participant 14) |
|  | Individual clinician experiences as motivation | “One of my lifelong observations as an acute care provider is we save bodies, the psyche and the mind didn’t seem to be coming along for the ride.” (Participant 3) |
| 5. Process (refers to the active changes that occur to encourage or discourage implementation of the intervention) | | |
| Creative problem-solving to increase resources and efficiencies | Using students/learners to help staff clinic to reduce time burden on staff who are volunteering | “…leverage some of our learners. So it’s not taking away the full responsibility of the pharmacist or doctor but using the learner time to reduce some of the limitations of professional volunteer time.” (Participant 1) |
|  | Financial set-up within existing hospital billing infrastructure | “It's somewhat just figuring out how to bill it, make it work within my system without sort of separating it out into its own entity.” (Participant 12) |
| Streamlining clinic processes | Following a systematic process to ensure consistency of approach amongst the clinic staff and ability of other clinicians to be able to run the clinic | “Ultimately if you had the doomsday scenario…the thing crashes and we're no longer here. Can someone continue the clinic as we have run it for the last two years? We have a standard operating procedure which is ridiculous and it’s detailed… it’s important because we’re as obsessive compulsive as probably everybody else around here, so we don’t want it to go too off field in terms of what we hope for the clinic.” (Participant 9) |

**Table E2 – Barriers to Implementation of ICU Follow-Up Clinics**

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| Barriers – Major themes | Barriers – Sub-themes | Supporting Quotes |
| 1. Characteristics of the intervention (refers to actual intervention being implemented) | | |
| Staffing a follow-up clinic | Logistics of scheduling and staffing a clinic despite interest across transdisciplinary team | “I only have so much time, I get occasional funding.’' (Participant 2) |
| Identifying appropriate patients | Selecting who will benefit the most in the cost-constrained environment of healthcare | “Screening... It is probably beneficial for everyone but we only have so much time and resources.” (Participant 6) |
| 2. Outer setting (refers to the economic, social, or political context of the organization) | | |
| Lack of collective identity of ICU survivorship | Patients and families understanding need and motivation to attend follow-up | “One of our biggest barriers honestly is just when they're not understanding exactly what they're getting the phone call about.” (Participant 15) |
|  | Clinical limitations of community-based resources to find the best care for ICU survivors | “I send them to neuro physiotherapist/occupational therapist - they don't understand the condition or the cognition prognosis and hope that they do the right thing for them.” (Participant 9) |
| Patient/family limitations to access clinic | Distance for patients to attend in some settings | “We're rural and we have a lot of people that are flown an hour plus helicopter ride.” (Participant 12) |
|  | Cost to patients to attend | “The extra co-pay for another doctor in a long panoply of doctors.” (Participant 4) |
|  | Caregiver burden on families to help get the patient to clinic | “The caregivers have said sometimes it's just too much work to get that sick person, who's still so dependent for even basic things like dressing and bathing and mobility.” (Participant 1) |
|  | Impact on caregiver employment to help get the patient to clinic | “They're losing time at work. They already lost so much time while their loved one was in the unit, they can't afford to lose anymore.” (Participant 2) |
| 3. Inner setting (refers to social, economic, political environment through which the implementation proceeds and that will influence) | | |
| Lack of funding | Working out how to pay staff for their time at clinic within a interdisciplinary model and justifying individual salaries | “Although nurses were enthused and keen - it is very much how their time in clinic would be paid versus rosters in ICU etc.” (Participant 8) |
| Lack of space | Finding a suitable environment for a interprofessional model to operate with multiple clinicians and multiple patients to co-ordinate | I find every one of us has dealt with [the space issue]. (Participant 10) |
| Practice variation between clinicians | Working out how to achieve consistency of how the clinic operates with multiple clinician involvement | “My clinic runs very well because I have sort of a system I go through in how I take care of people...integrating another provider in, that can be challenging.’’ (Participant 5) |
| 4. Characteristics of individuals (refers to the people who play an important role in implementation) | | |
| Limitations of clinicians as volunteers | Clinicians volunteer their time to attend clinic although there are limits to how much one can volunteer | “There's a certain amount of time you can do as a volunteer and then you sort of reach your critical threshold where you can't really do it as a volunteer.” (Participant 4) |
| 5. Process (refers to the active changes that occur to encourage or discourage implementation of the intervention) | | |
| Hospital billing infrastructure | Inadequately designed hospital/insurance systems that do not cater for ICU follow-up and creates confusion | “I'd say it confuses the staff and the patients greatly.” (Participant 1) |
|  | Figuring out how to code for funding of clinic | “If you don't call it post ICU care people were more willing to pay for it, not because they didn't want the clinic but they were unsure of how to bill it.” (Participant 13) |

**Table E3 – Enablers to Implementation of Peer Support Groups**

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| Enablers – Major themes | | Enablers – Sub-themes | | Supporting Quotes |
| 1. Characteristics of the intervention (refers to actual intervention being implemented) | | | | | |
| Building social cohesion | Introductions to set the scene | | "Establishes what the purpose of the two hours is for, make sure everybody is engaged with why they’re there, and if they didn’t want to be there because it’s not quite what they expected, they’re free to go.” (Participant 12) | |
|  | Ground rules for group functioning | | "Confidential, non judgment, listening and then sharing.’' (Participant 7) | |
|  | Bringing survivors together can help normalize their experiences | | "Actually it’s much easier to normalize something if they’ve got other people who’ve been through similar experiences. It’s much better to hear from them than from a health care professional, no matter who that might well be… it was another really powerful way of normalizing the experience and helping the patients.” (Participant 11) | |
|  | Peer support drives a powerful connection and sense of community | | "[What] we’ve noticed too is just how effortless the groups are once you get people in to them, because we were all worried, what are we going to talk about? What about this, what about that? So a lot of worries going into it, but really the groups take care of themselves.” (Participant 10) | |
| Defining operational processes | Structured versus unstructured format | | “It’s an unstructured open forum. We do have ground rules and a sign in sheet though.” (Participant 4)  “We’ll introduce a theme, e.g., fatigue or sleep, just to start the conversation and then they tend to divert to other things.” (Participant 2) | |
|  | Supportive space to meet that may be separate from the ICU | | "Our room is in a separate area of actually the cancer hospital, but the room is very bright, open – [it] had big windows, so it seems to allow for expression and for feeling relaxed and comfortable.” (Participant 12) | |
|  | Flexibility in timing of peer support across care arc | | '"We realized that these people really need a lot of help right here, right now... we’ve addressed the needs of the family in the midst of the crisis, at a critical time.” (Participant 8) | |
| Accessing skilled group facilitation | Having more than one facilitator of the group to support each other and attendees | | "Doing it on your own, that’s a hard call. I think you should always have someone else, someone to look out for the unexpected, and also be there to feedback afterwards.” (Participant 5) | |
|  | Creation of online community to support each other | | "At the beginning I was very much moderating that and felt that I had to respond to everybody’s posts just to keep it going and to keep the thread alive. But now that there are a lot of people participating in it they are mentoring and moderating each other.” (Participant 7) | |
|  | Identifying survivors who could potentially co-lead and drive a group | | "'We had always hoped that within the group... there would be some sort of - a couple would rise up to the top, self-promote themselves as potentially interested in taking this upon themselves. And we’ve managed to achieve two or three people." (Participant 10) | |
| Value of debriefing for the clinician group leads | Post group debrief to support the clinicians running the groups | | "We try to have a debrief, maybe a day or so afterwards, for one reason because like you said there’s a little bit of a stress that goes along with it.” (Participant 7) | |
| 2. Outer setting (refers to the economic, social, or political context of the organization) | | | | | |
| Membership to SCCM Thrive Peer Support Collaborative | | Creating momentum | | "From more of an organizational perspective, just how after being invited into the collaborative our work with post-ICU syndrome has just exploded. It’s just that’s when it really essentially came on the map for us.” (Participant 1) |
|  | | Creating an international community of support for clinicians | | "I think it’s also been just helpful to hear that whether you’re in the US health care system, the UK, or Europe, or Australia, you face the same battles, and I don’t know why but it’s nice to hear that you’re not alone and struggling, because if you did you’d probably give up a lot sooner.” (Participant 9) |
|  | | Humanistic motivation to drive improvement in post ICU care | | "I think the collective desire to fight forces that are trying to thwart what is, I think we all agree, is a good thing for these people on a humanitarian [basis] – you know makes it a more human approach to this whole problem.” (Participant 2) |
|  | | Financial support | | "I don’t even think we’d be able to start it if there wasn’t the opportunity to join Thrive and get that initial grant because they’re probably – the executives just probably think nice, means we don’t have to give you money at the get go...I think the name of SCCM, too, helps carry weight.” (Participant 13) |
|  | | Stimulates greater integration across SCCM driven initiatives | | "I work with the physician director of the critical care medicine department who has been focusing on the A through F bundle, implementing that, and he’s been doing that sort of in isolation and I've been doing this in isolation. And I think this is going to be a great opportunity for us to come together and actually work together on this in tandem.” (Participant 5) |
|  | | Provides professional satisfaction | | "I've been telling people that professionally this has been the most satisfying thing I've ever done, and I think it does a lot for preventing burnout and giving you a different focus and sense in your work, giving you a higher sense.” (Participant 10) |
| 3. Inner setting (refers to the social, economic, political, and social environment through which the implementation process proceeds) | | | | | |
| Engaging participants into the group | | Using email reminders to support attendance | | "A sign in sheet where I take the family members’ emails if they want to be contacted in the future about being reminded about the group. I’ll shoot an email out once a week to remind them to come back.” (Participant 12) |
|  | | Raising awareness using promotional materials | | "We highlight it and we show it to our families in the ICU and let them know that this is a resource that they can use at any point. They can sit in the room, while they’re at the bedside with their family member.” (Participant 2) |
|  | | Providing alternatives to attending in-person | | "People can come personally but if that’s a difficulty for them they can call in... recognizing that maybe physically coming to a meeting might be difficult.” (Participant 7) |
|  | | Snowball advocacy emphasizing the value of the group | | "We just started grabbing the inpatient families and then that helped us grow getting the patients because the wives would talk to the patients and say hey, you need this, and then that got the patients, and now the patients are recruiting other patients.” (Participant 11) |
|  | | Follow-up clinics can serve as screening for entry into group, identifying potential risks | | "It’s also nice doing it after clinic because we’ve had a chance to screen them and see what the risks are that might occur in the support group, so we’re either prepared or we can see if it’s not for them at the moment.” (Participant 2) |
|  | | Using list of discharged patients from ICU as mechanism for screening and recruitment | | “…Knowing who to screen or who to think about having… but we only have so much time and so many resources."(Participant 4) |
| 4. Characteristics of individuals (refers to the people who play an important role in implementation) | | | | | |
| Motivated interprofessional clinicians | | Inspired by other colleagues running support groups in other cohorts | | "I reached out to one of the nurse practitioners that has been running a support group for subarachnoid hemorrhage survivors for many years...and was actually greatly inspired because of the thriving community that has been created within that patient population.” (Participant 9) |
| Patients and family volunteers and advocates | | Former patients can welcome the opportunity to give back through contribution to group | | “The ultimate idea of those who have recovered well enough and do want to give back, and that is a theme that we’ve heard from our support group, that they can come back to the ICU and be that inspiring person.” (Participant 12) |
|  | | Former patients can become advocates | | "A patient and family came and talked about their experiences and there were 150 people in the audience, and it was quite amazing that they did that...they’re sort of advocates for us now” (Participant 6) |
| 5. Process (refers to the active changes that occur to encourage or discourage implementation of the intervention) | | | | | |
| Leveraging off ICU follow-up clinics | | Building trust with patients through clinics supports attendance at peer support | | “I think that rapport’s really key. They have a bit of trust and confidence that they know they’re – that they got something out of the clinic, therefore they’re probably going to get something out of coming to this.” (Participant 3) |

**Table E4 – Barriers to Implementation of Peer Support Groups**

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| Barriers – Major themes | | Barriers – Sub-themes | Supporting Quotes |
| 1. Characteristics of the intervention (refers to actual intervention being implemented) | | | |
| Patient and family non attendance | Low attendance contributing to sense of group being unsuccessful | | "We had several occasions when no patients or family members actually came, and then two occasions when we had one, and then two family members show up.” (Participant 1) |
|  | Identification of appropriate patients to attend peer support group | | ‘’While we had a high acuity group, they were predominantly white Anglo Saxon and mostly couples, we probably have people with different perspectives and if we want an ‘’all comers’’ approach, opening up to different groups with a shorter stay or non-English speaking background or culture [is necessary].’’ (Participant 12) |
|  | Access to peer support and spreading awareness to other clinicians to benefit more survivors than a limited few | | "I think the difficulty is scaling it up from - the people that actually go to these meetings derive a huge benefit from hearing these stories but that’s a tiny fraction of all of the people that work in critical care units, and we have the same issue. How do you spread that knowledge and information to the broader team?” (Participant 8) |
| Access to skilled facilitator | Access to skilled facilitators and who is best placed to act as facilitator | | "Trying to decide who comes to facilitate groups and what their qualifications are. The social worker was wanting to own that and didn’t want MDs to facilitate, but then ended up not having staff that sort of – like, who was willing.” (Participant 9) |
| 2. Outer setting (refers to the economic, social, or political context of the organization) | | | |
| Nil | Nil | | Nil |
| 3. Inner setting (refers to social, economic, political environment through which the implementation proceeds and that will influence) | | | |
| Bureaucratic limitations of health services | Reluctance within some organizations for promotional material to be distributed | | "It’s been a slow start figuring out how best to remind people. Our hospital has been resistant to us handing out any flyers.” (Participant 3) |
|  | Organizational limitations create challenges to contacting people post-hospital discharge | | "We couldn’t figure out how to get contact with our families after they’d left and there was a lot of red tape.” (Participant 4) |
|  | International differences in organizational restrictions | | "There seems to be quite a lot more red tape and bureaucracy on the American sites...I mean it sounds like it makes it really hard, hard work to do simple things.” (Participant 11) |
| 4. Characteristics of individuals (refers to the people who play an important role in implementation) | | | |
| Therapeutic trust and rapport | Perceived limitations of building trust between some clinicians and patients | | "When you have physicians walk in there’s like a team of 12 of them sometimes and some, especially veterans, have a trust issue and they are a little reluctant to speak to the doctor versus – they tell the nurse a whole another story, they tell the chaplain a whole another story, but tell the doctor I'm fine, I'm doing fine.” (Participant 5) |
| Challenges in managing expectations of former patients as volunteers | Dependency of former patients when they have moved into a volunteer role and managing expectations | | "Initially with our volunteers we had a really good couple of volunteers. They came back for two, three cohorts and then they didn’t want to stop doing it. So that was a difficult situation.” (Participant 12) |
| 5. Process (refers to the active changes that occur to encourage or discourage implementation of the intervention) | | | |
| Nil | Nil | | Nil |