Article ID: 2020-0273

Title: Community implementation of the 3 Wishes Program: an observational study of a compassionate end-of-life care initiative for critically ill patients

Authors: Brenda K. Reeve MD, Brittany B. Dennis MBBS PhD, William Dechert MSc, Barbara Longo RN BScN, Diane Heels-Ansdell MSc, Alison Scholes, France J. Clarke RRT, John R.K. Arthur M.Div, Deborah J. Cook MD MSc

Reviewer 1: Dr. DiDiodato

Affiliation: Royal Victoria Regional Health Centre, Critical Care Medicine

Comment 1: **The 3WP was implemented in a community-hospital ICU program as a quality improvement initiative to improve end-of-life care for ICU patients at high risk of dying or being withdrawn from life support interventions. A subsequent retrospective evaluation of the program's reach, adoption, implementation and maintenance was undertaken by the investigators. In total, 101 patient events were reviewed over a two-year period from 2017 to 2019. There were 479 terminal wishes, with 50% originating from the ICU team. About 90% of wishes cost nothing. Over 99% of wishes were realized. Could the investigators provide some moredetailed information regarding the pre-existing research capacity of the community hospital? For example, was there a research coordinator already present at the hospital prior to the study or was someone hired specifically for the study? Does the community hospital have other paid research staff?**

Author Response: We would first like to thank Dr. DiDiodato for the thorough evaluation of this work. There was one pre-existing research coordinator based in the ICU at our community site. There were no other paid research staff in the hospital. Our capacity for research has been building since 2015, with the provision of one dedicated research staff hired by McMaster University. Monetary support for this staff is provided through grant support for the management of 2-6 clinical trials. This staff was not provided for the 3WP.

Comment 2: **I realize this is a descriptive study, but it would be interesting to know what proportion of all patients who met eligibility criteria during the study period consented to the 3WP? An exploratory analysis of some of the differences between thosewho consented and those who didn't might provide additional research questions that could be evaluated in a continuous QI cycle to further improve the 3WP program at the hospital.**

Author Response: Dr. DiDiodato has provided an excellent suggestion which would certainly generate important information to be used for quality improvement andprogram uptake. Unfortunately, there were too few participants to be able to draw any meaningful conclusions using comparative analysis. In-fact, a total of 10 families declined to participate over the three years of this program evaluation. To be able to adequately explore the reasons for refusal we could have asked directly or employed more qualitative methodology, however this would be beyond the scopeof this study and we do not have REB approval to do this retrospectively (nor do we have information recorded to allow this contact). We will certainly consider this idea for future program implementation elsewhere.

Comment 3: I found it very interesting that 50% of wishes originated from healthcare providers. It would be interesting to do an exploratory analysis of the differencesbetween the wishes generated by family and those by providers. Were the families and patients made aware of these healthcare provider-initiated wishes or were they realized without the family's/patient's knowledge?

Author Response: Most health care provider wishes were presented as local flavours of artistic creations and memory pieces such as EKG tracings, fingerprint frames. The first wish or wishes were often suggested by Health care workers as icebreaker thoughtful ideas, or playing favourite music, and candles, and then followed by family wishes. While we do agree this would be an interesting exploratory analysis, the current study is underpowered to evaluate these differences, but we wanted to make a few notes in response in this letter, as above. Thank you for asking.

Comment 4: **The 3WP is a great initiative, I'd like to commend the investigators on a well-written, and well described QI program that involved an academic- community partnership. While the community hospital may not have had any role in the originaldesign of the 3WP, they certainly seemed to have a significant role in supporting their hospital's adoption and implementation.**

Author Response: We again thank Dr. DiDiodato for thepositive feedback and warm reception of the 3WP.

Reviewer 2: Dr. Sy

Affiliation: Regina General Hospital, Critical Care Medicine

Comment 1: **Reeve, Dennis, et al. describe the implementation of the 3 Wishes Project in a community intensive care unit (ICU) setting, demonstrating its feasibility outside of traditional academic research institutions. They found that the program was reasonably low per patient and may have inherent value for improving dignity at end-of-life. I thank the authors and the editors for**

the opportunity of reviewing an excellent project that has very meaningful impact topatients, their families, and clinicians. The project itself is of great interest to the community intensivist, academic intensivist, and those interested in palliative care. The manuscript is overall well-written. My comments are relatively few. The 3WP has the opportunity of being very impactful to many ICUs in Canada/North America and potentially worldwide. I appreciate that the goal of this article was to demonstrate that this project could be feasible for a smaller centre, and potentially even encourage other centres to uptake this.

Author Response: We thank Dr. Sy for this comprehensive assessmentof this report. We appreciate the positive feedback and are delighted that the 3WP appears to be of value.

Comment 2: **The prospect of starting a new program in a community centre ICU can be daunting for some community clinicians and even administrators. My only major comment relates only to the background knowledge and administrative undertaking required of the 3 WishesProject for ICUs to start their own similar program. I had an opportunity during the review of thismanuscript to read the prior publications and the 3WP website from the research team to understand the scope/background of this project better. I enjoyed the schematic in the one of the original Annals of Internal Medicine article about the 3WP which outlined how this project could be potentially implemented in a non-research setting/championed locally. I wonder if this could be included into this manuscript.**

Author Response: We appreciate this excellent suggestion. While weagree it may be useful to provide this image in the article, the cost and organization of re-printing with permission may be challenging. We will instead ensure we include a clear citation to the figure from theoriginal multi-centre investigation. Please refer to page 6 (paragraph 2) of the manuscript.

Comment 3: **Some more prescriptive information for centres, even a start-upguide that could be provided as an appendix could be incredibly useful for community ICUs wanting to know: A) what are some of the administrative steps needed to embark on this, B) Estimation of what would be reasonable start-up costs 500-1000**

Author Response: This is an excellent suggestion and will offer support to other community centres wishing to facilitate the 3WP for their patients. We have included anew supplementary appendix with information on program implementation. Please see our new supplementary appendix submitted with this submission.

We have introduced this guide on page 6 (paragraph 3) of the manuscript, where we write:

"*A 3WP program brief start-up guide is provided in our Supplementary Appendix, SA:Figure 1. This toolis useful to guide clinical staff on the process and logistical steps needed to help organize the 3WP and integrate it into their care path. This guide was distributed during the initial multi-centre evaluation,[4] to provide direction on early conversations and introduce the 3WP to families. This figure shows the flow for wish elicitation and facilitation. It is important to acknowledge the 3WP is inherently flexible and willbe adapted to each individual institution."*

Comment 4: There are some very minor grammatical/sentence structurecomments

1. **Introduction: Missing space between "patient-and family-centered" (page 3)**
2. **Discussion: "Bedside nurses were not only responsible… reflecting strong patient advocacy. forthemselves" (page 10): Suggest deleting "for themselves."**
3. **Suggest more formal language – "like others such as rapid…" (line 36-37, page 10): Could usewords such as "similar to…"**
4. **Page 11 – line 23-25 – outcome should be "outcomes"**
5. **Page 11 – line 27-30 – "relatively fewer human and other resources" – suggest more formal language**

Author Response: Thank you. We have revised the manuscript toaddress these grammatical errors and sentence structure suggestions. Thank you.

Comment 5: **2. Figures/Images – Suggest Image 1 and Figure 1 be both Figures, i.e., Figure 1 and Figure 2 [Editor's note: please implement this comment.]**

Author Response: We have changed Image 1 to be included as aFigure. It is now Figure 2.