Commentary: Two to Tango and a Team to DUET

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Word Count: 496

Disclosures: None

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This is the author's manuscript of the article published in final edited form as:

Blitzer, D., & Copeland, H. (2021). Commentary: Two to Tango and a Team to DUET. The Journal of Thoracic and Cardiovascular Surgery. https://doi.org/10.1016/j.jtcvs.2021.10.050

Central Message: The application of a multidisciplinary approach to the management of infectious endocarditis resulting from intravenous drug use is an important step forward toward achieving the best results for these technically and ethically complex patients.

Central Picture Legend: A multidisciplinary model for the management of endocarditis

Figure 1 Legend: A multidisciplinary model for the management of endocarditis

In this edition of JTCVS, Paras et al describe the experience and results at their institution after the implementation of a multidisciplinary Drug Use Endocarditis Treatment (DUET) team, which incorporated clinicians with expertise in cardiac surgery, infectious disease, and addiction medicine among others for the management of patients with drug use-associated infectious endocarditis (DUA-IE) [1]. While a multidisciplinary approach has become increasingly prominent for cardiovascular disease, it has only more recently come to prominence for the management of DUA-IE [2-5]. The authors are to be lauded on the application of this strategy to DUA-IE, in particular for the incorporation of addiction medicine specialists to the team.

As seen in this paper, the complexity of managing cases of DUA-IE is multifactorial and results from the technical perspective that many have undergone prior cardiac surgery. In this study 22.2% were reoperative cases in the pre-DUET era and 36.8% in the post-DUET era [1]. At many institutions, the decision to operate on these patients is left to the discretion surgeon, and it would appear that the DUET approach may have led to more complex procedures as noted by significantly increased cardiopulmonary bypass and cross-clamp in the post-DUET cohort [1].

These cases are also complex from the resource allocation and/or ethical perspective in that the recidivism rate for these patients remains high. By including addiction medicine in the DUET team, Paras et al appear to be addressing the issue of recidivism, and the post-DUET cohort did have shorter time to addiction medicine referral and higher rates of post-operative surgical follow up [1]. Longer follow-up should clarify the impact of this approach to rates of recidivism. Lastly, management of DUA-IE can be difficult for the healthcare providers who are forced to deal with these issues on an increasing basis. Through a survey given to members of the DUET team, Paras et al demonstrated a high rate of approval of the DUET strategy by healthcare providers, although the impact of the DUET team on issues such as burnout and moral injury remains to be seen.

The DUET team is unquestionably a worthwhile endeavor; however, there remain many questions to be addressed. For instance, of the 76 patients discussed by the DUET team, 21 underwent a cardiac surgery intervention, which also means that 55 patients were declined an intervention, for a rejection rate 72.4%. An analysis of these patients and the ways that the DUET team could benefit them would be intriguing. Paras et al identified dietary consultation as a potential addition to the DUET team given the need for nutritional optimization for these patients [1]. Also, worth consideration as an addition would be representatives from a clinical ethics team. Given the high rate of rejection for surgical intervention, the clinical ethics team may offer valuable input for the team. While there may be room for improvement, the ultimate goal and effect of the DUET team is commendable and the concept is worth replicating in any hospital system dealing with this epidemic.

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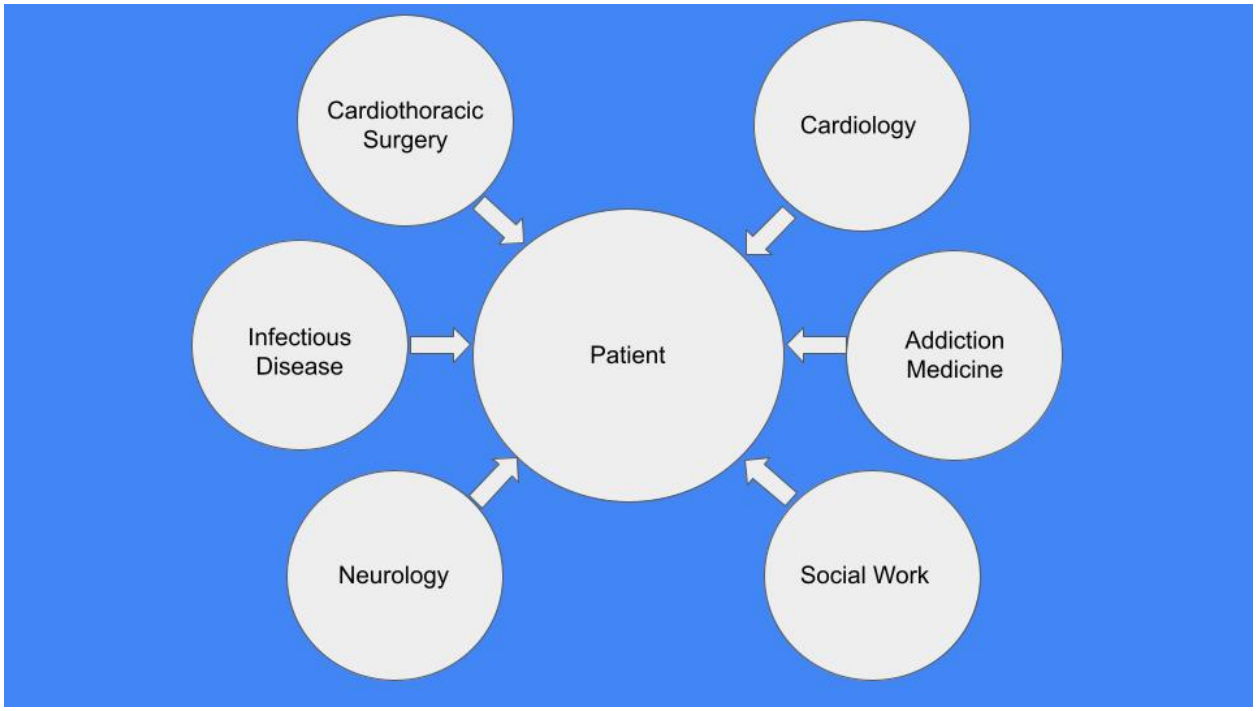
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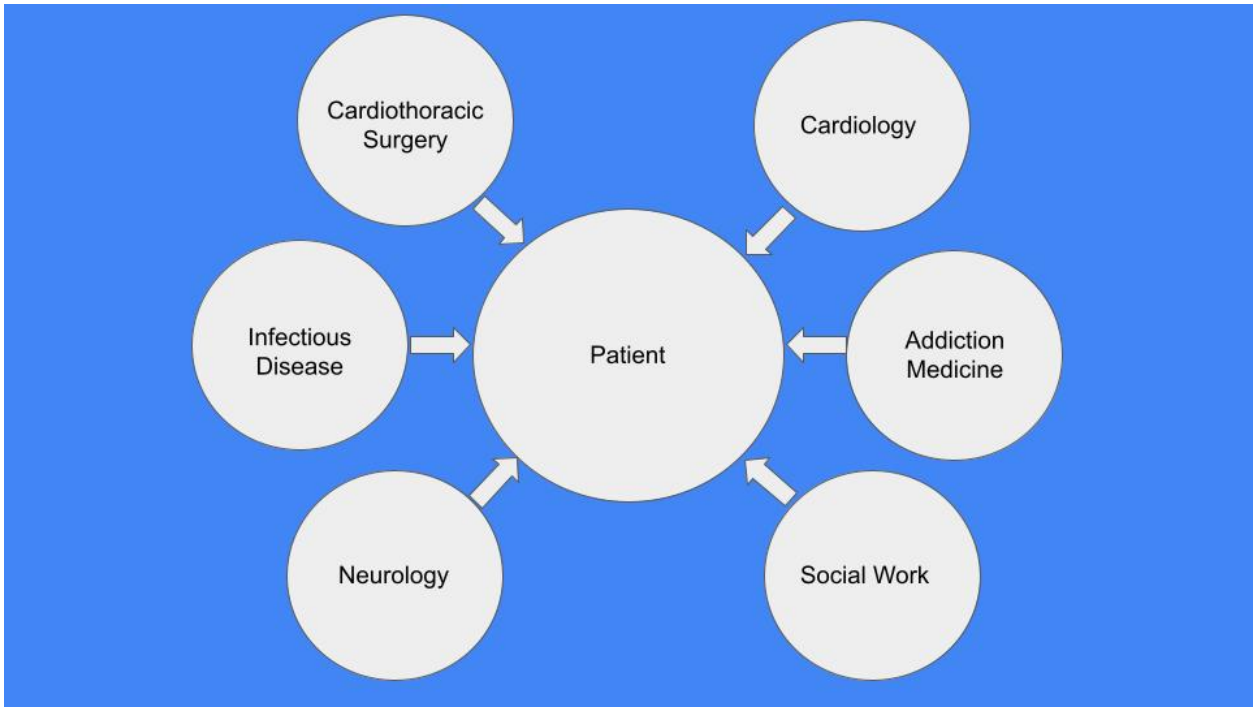
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