**Treatment Escalation Plans**

**Summary of relevant Literature**

**The benefits of using a TEP**

*1. Reduced referrals to ICU*

An overall 12% reduction in ICU referrals after introduction and extensive training

Fadel et al., BMJ Open Quality 2018; 7: e000268 Doi: 10.1136/bmjoq-2017

*2. Reduced levels of inappropriate out-of-hours care*

Overall 11% of patients with TELP received inappropriate care compared to 44% without TELP

Stockdale et al., BMJ Quality Improvement 2013. Doi: u202653.w1236/bmjquality

*3. Reduced medical harms and non-beneficial interventions in patients at end-of-life*

The impact of a treatment escalation / limitation plan on non-beneficial interventions and harms to patients during their last admission before in-hospital death, using the Structured Judgment Review Method.

Lightbody *et al.* BMJ Open 2018; 8:e024264.  doi: 10.1136/bmjopen-2018-02426

*4. Reduced hospital costs associated with non-beneficial interventions*

Patients with a TELP (n=152) had a mean reduction in hospital admission costs of GB £220.29 compared to those without a TELP (n=132) (p=<0.001).

Bouttell *et al*., Economic impact of reduction in non-beneficial interventions following the introduction of a treatment escalation / limitation plan. Int. J. Qual. Health Care 2020. In press.

*This was a collaboration with the Health Economics Department, Institute of Health and Wellbeing, University of Glasgow.*

*5. Reduction in inappropriate antibiotic use at end of life*

2/28 patients (7.1%) with a TELP that included an antimicrobial ‘ceiling’ received antimicrobials on the day of death, compared to 18/53 (34.0%) among those who did not have a ‘ceiling’.

Wilder-Smith *et al*., J R Coll Physicians Edinb 2019; 49: doi: 10.4997/JRCPE.2019.XXX

*6. Improved quality of death: patient / family expereince*

The impact of advance care planning on end of life care in elderly patients: randomised controlled trial. Detering *et al.,* BMJ 2010; 340: 1345. doi: <https://doi.org/10.1136/bmj.c1345>

*7. Reduced likelihood of complaints by relatives following death of a patient in hospital*

A case-controlled study of relatives’ complaints concerning patients who died in hospital: the role of treatment escalation / limitation planning.

TEPs were used less frequently in complaint cases compared to controls (23.8% versus 47.2%, p= 0.01).

Taylor et al., Int. J. Qual. Health C[a](http://eprints.gla.ac.uk/view/journal_volume/International_Journal_for_Quality_in_Health_Care.html)re. 2020; 32: 212-218.

*This was a collaboration with the Health Economics Department, Institute of Health and Wellbeing, University of Glasgow.*

*8. Nursing: Hospital Emergency Care Team*

Using treatment escalation and limitation plans to ensure appropriate emergency care.

Holmes et al., *Nursing Times* [online]; 2019; 115 (11): 38-41.

***Other related topics***

*9. DNACPR: Reduced number of complaints related to DNACPR orders*

After two years of regular use of TEP, number of DNACPR complaints reduced to zero in NHS Weston Area Health

Shermon *et al*., BMJ Open Quality 2017. Doi: 10.1136/bmjoq-2017-000011

ALSO

Resuscitation policy should focus on the patient, not the decision.

Fritz *et al.* BMJ 2017;356:j813 doi:[10.1136/bmj.j813](https://www.bmj.com/lookup/doi/10.1136/bmj.j813); doi:[10.1136/bmj.j876](https://www.bmj.com/lookup/doi/10.1136/bmj.j876)

*10. Philosophy of medical care and ethics*

Futility and appropriateness: challenging words, important concepts

Taylor *et al*., *Postgraduate Medical Journal.*2018; 94: 238-243.