Integrated Care for High Risk Surgical Patients – Before, During and After

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Rachelle Kaye¹, Reut Ron¹, Bella Azaria¹, Michal Bar-Ilan¹, Erela Rotlevi², Tanya Iacubovsky²

1: Assuta Medical Centers, Israel;
2: Maccabi Healthcare Services, Israel

More than 230 million major surgical procedures are undertaken worldwide each year. In the NHS, 15% of all those who need surgery as a hospital inpatient about 250,000 people are high-risk patients] by projection about 34 million patients worldwide. European studies have reported incidences of acute readmissions within 30 days of discharge among elderly medical patients ranging from 11% to 22%. About 10% of patients undergoing surgery in the UK are at high risk of complications, accounting for 80% of postoperative deaths. There is a growing consensus that we need to implement a process to ensure the individual needs of complex patients are carefully coordinated from the decision to offer surgery, through to the weeks and months after the procedure.

CONNECARE, a H2020 funded project, aims to address these challenges by developing and implementing an ICT supported model for patient centered integrated care for complex patients over 65 undergoing major elective surgery. A major component of the model is prehabilitation: a “holistic preparatory intervention aiming at reducing perioperative complications wherein both enhanced aerobic capacity, through supervised endurance exercise training, and promotion of physical activity play central roles”.

This model is now being implemented in Spain, the Netherlands and Israel and preliminary results are already available in Catalonia]. A full evaluation of outcomes will be available in mid-2019.

In Israel, the CONNECARE program is being implemented within the context of an integrated care system spearheaded by Assuta Hospital in the city of Ashdod in cooperation with Maccabi’s second largest Health Plan in Israel community healthcare services and the Municipality responsible for social care. High risk complex patients are identified when being evaluated for surgery, assigned a hospital nurse case manager and entered into a personalized one month prehabilitation program supported by CONNECARE digital tools including a self-management App that has been co-designed with clinicians, patients, together with the technicians. Post-surgery, the case manager coordinates inpatient care while working with the Maccabi Integrated Care team and municipality social services to plan the patient’s discharge home. After discharge, the patient continues to be supported by the Maccabi Integrated Care
nurse and the CONNECARE self-management App in coordination with the family physician and all other caregivers in the community.

There is a growing body of evidence supporting prehabilitation. Post-discharge care in the community has increasingly been demonstrated to improve outcomes and prevent readmissions. The uniqueness of the CONNECARE program in Israel is the melding of these in one seamless program across care levels supported by CONNECARE co-designed digital tools.

Similar programs are being implemented in all CONNECARE sites, using an implementation research methodology, with detailed documentation of obstacles, solutions and critical success factors to enable scalability and transferability within and between partner countries as well as internationally. Among lessons already being learned is that one of the main challenge for successful integrated care is forging the cooperation of clinicians, health and social care professionals, and their organizations.

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