Rapid Recovery Fragility Hip Fracture Programme

Hip fractures related to osteoporosis and poor bone quality are an indication often observed with elderly. Literature shows that structured hip fracture programmes offer great benefits to these patients and their healthcare providers.³ Zimmer Biomet understands the challenges that health care providers are facing while treating fragility hip fractures. Together with healthcare professionals, we have developed the Rapid Recovery Fragility Hip Evidence based Programme. The programme is based on the principles of fast-track surgery, combined with process redesign and patient/family engagement.

The Rapid Recovery Fragility Hip Fracture Programme is Designed to

- · deliver patient- and family-centred care,
- minimise complications and enhance treatment quality and thereby improve patient outcomes,
- enable efficient use of hospital resources with a potentially challenging patient group.

Benefits, the Programme Can Bring:

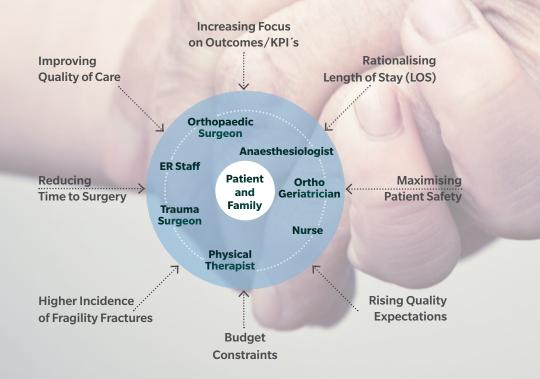
- 1. Optimised patient pathways, allowing earlier access to surgery, mobilisation and reduced 30 day mortality ^{4, 5, 6, 7, 8, 9, 10, 11}
- 2. Reduced Length of Stay through efficient service delivery and earlier meeting of discharge criteria^{12, 13, 14, 15, 16, 17}
- 3. Improved quality of care, coordinated through a multidisciplinary team^{18, 19, 20, 21}

1.(Kates, S. L. (2016). Hip fracture programs: are they effective?. Injury, 47, S25-S27.)/ 2. https://www.idbonehealth.org/europe-35-million-new-fragility-fractures-occur-annually-shows-data-published-today/ 3. Kates, S. L., Mears, S. C., & Sieber, F. (2011). A guide to improving the care of patients with fragility fractures. Geriatric orthopaedic surgery & rehabilitation, 2(1), 5-37/.4. Kamel HK et al. J Gerontol A Biol Sci Med Sci. 2003 / 5. Oldmeadow LB et al. ANZ J Surg. 2006/ 6. Rasmussen S et al. Ugeskr Laeg, 2002/ 7. Botella-Carretero J et al. Clin Nutr. 2010/ 8. Hoekstra J Cet al. Clin Nutr. 2011/9. Björkelund KB et al AANA J. 2011./ 10. Parker MJ et al. Cochrane Database Syst Rev. 2004/ 11. Luger J et al. Osteoporos Int. 2010/ 12. Khan SK et al. Injury. 2009/ 13. Rademakers LM et al. Eur J Taruma Emerg Surg. 2007/ 14. Cameron ID et al. Disabil Rehabil. 1993/ 15. Currie C et al. NHFD Report 2011/ 16. Jensen PS et al. Ugeskr Laeg. 2007/ 17. Gholve PA et al. Jinyuz 2005/ 18. Scott A et al. Health Policy 1993/ 19. Kates SL et al. Osteoporos Int. 2010/ 20. Friedman SM et al. Arch Intern Med. 2009/ 21. Kates SL et al. J Orthop Trauma. 2011

Meeting the Needs of an Ageing Population

With higher life expectancy, health care faces new challenges: among an ageing population the risk of frailty increases. Falls are more likely to occur, which can result in disease patterns not usually seen in younger patients. Treating fragility fractures requires special attention. The incidence of comorbidities increases with age, but so does this patient group's expectations and demands for treatment that enables them to return to a good quality of life. Mobility and return to daily, pre-fracture, activities are an expectation for many. To meet all these needs, adequate and differentiated care needs to be provided to frail fracture patients. While looking at how pre-, peri- and postoperative care can be designed best, both hospital and social resources need to be considered. Zimmer Biomet's Rapid Recovery Programme supports trauma and orthopaedic departments in establishing optimised care pathways for fragility fracture treatments.

With coordinated health care management, based on medical evidence, the elements needed to provide best-in-class surgical care are implemented. This multidisciplinary approach is key to succes.



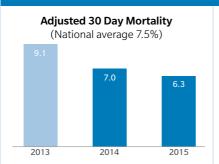
Our Experience

Zimmer Biomet have 20 years of experience in the engagement of optimising musculoskeletal, surgical care pathways across Europe.

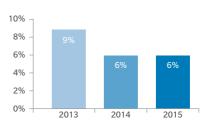
In close collaboration between Zimmer Biomet and a strong network of experts from across the world and numerous scientifically renowned advisors, we have developed and continued to improve the Rapid Recovery Programme for different surgical procedures (e.g. hip, knee, spine and shoulder). We observe, learn, cocreate and help to implement best practices in the management of musculoskeletal surgeries.

Rapid Recovery Programmes have been adopted and embedded in over 200 hospitals across Europe, more than 20 of those programmes are dedicated Fragility Hip Fracture Programmes.

Example of a UK Achievement

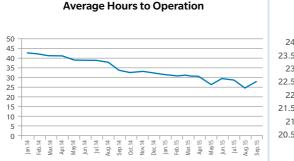


Clinical Enhancements

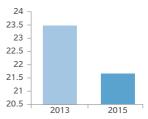


30 Days Readmissions (%)

Process Redesign



Length of Stay Reduced by 1.8 Days



Achieve More with the Rapid Recovery Programme



From Understanding to Acting: Our Implementation Concept

Process Redesign & Patient Engagement

Example of activities:

- Synchronization of all critical steps from ER admission to rehabilitation
- Definition of interdisciplinary agreed standards, protocols and checklists
- Development of process for active patient and family involvement

Compass

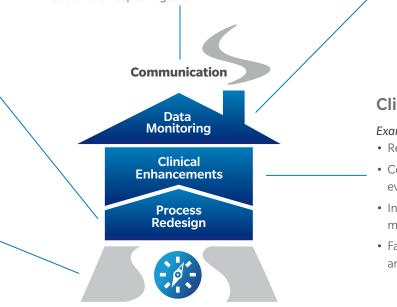
Example of activities:

- Quantitative data analysis and interviews with all team members involved in the process
- Analysis of protocols, checklists, information materials etc.
- Identify and quantify goals and potential for improvement



Example of activities:

- Establish strategic communication tools to external stakeholders
- Determine and execute against initiatives to achieve hospital's goals



Data Monitoring



- Ensure ongoing transparency
- Follow-up and adjustments

Clinical Enhancements

Example of activities:

- Review of current care pathway
- Continuous implementation of current clinical evidence into practice
- Introduction of coordinated care for the patient, minimizing impact on body and mind
- Facilitating early mobilisation to reduce complications and optimise outcomes

Zimmer Biomet is committed to helping you deliver the best outcomes for your patients and department – supporting you every step of the way. We start by analysing your specific needs and understanding how our and your resources can be best used to meet those needs. Together, we aim to maximise value across the entire care pathway and ultimately deliver the best possible care to your patients.

Contact Us!

Would you like to learn more about Zimmer Biomet's Rapid Recovery Fragility Fracture Programme and how we can cooperate in optimising the care for the frail and elderly hip fracture patient?

Please contact our team at ann.vanbulck@zimmerbiomet.com



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Optimising Fragility Fracture Care Pathways

Rapid Recovery Fragility Hip Fracture