

Cancer Survivorship and Enablement

Ms Kathryn Rorke – St John of God (SJOG) Bendigo Hospital

Dr Michael Leach – Loddon Mallee Integrated Cancer Service (LMICS)



The expected tsunami of cancer survivors...



SJOG Bendigo Multidisciplinary Outpatient Oncology Rehabilitation

Individual patient assessment;
psychosocial screening & fitness
→ Formation of collaborative goals

**8-week group rolling program
at SJOG Bendigo Hospital
1hr exercise & 1hr allied
health education per week**

Individual patient reassessment;
psychosocial screening, fitness &
goals
→ **Discharge letter re: outcomes**



Retrospective audit of patient discharge letters (n=58)

Non-identifiable data extracted

Patient demographics & needs

Statistical analysis of pre to post assessment data.
Criterion for a significant difference in patient
outcomes; p-value < 0.05.

Does this model meet the needs of cancer survivors?

Multidisciplinary Outpatient Oncology Rehabilitation

Exercise & education component

	Allied Health Discipline	Education Topic
<p>Group Exercise</p> <ul style="list-style-type: none"> • aerobic, resistance, balance and stretches. • exercise physiologist and physiotherapist supervise • Exercise circuit is individualised to address needs and level of deconditioning. 	<p>Physiotherapy</p>	<ul style="list-style-type: none"> • Program overview – Bringing it all together and getting the balance right • Calming the body and mind <ul style="list-style-type: none"> - Muscle stretches, relaxation and sleep - Introduction to Pastoral Care and Music Therapy
	<p>Exercise Physiology</p>	<ul style="list-style-type: none"> • Home exercise and guided relaxation • Tai Chi practical and relaxation
	<p>Psychology</p>	<ul style="list-style-type: none"> • Living with a cancer diagnosis <ul style="list-style-type: none"> - Life changes and communication • Coping with stress
	<p>Dietetics</p>	<ul style="list-style-type: none"> • Nutrition and Cancer
	<p>Occupational Therapy</p>	<ul style="list-style-type: none"> • Fatigue management <ul style="list-style-type: none"> - Returning to your normal activities and relaxation.

Retrospective audit of patient discharge letters - Patient demographics:

- 64% of the patients were aged \geq 65 years
- 67% were women
- Most common cancer diagnoses were gastrointestinal (33%), breast (29%) and haematological (17%)
- 27% had nodal or distant metastatic spread
- 25% did program during chemotherapy course

Retrospective audit of patient discharge letters - Symptoms and treatment side effects:

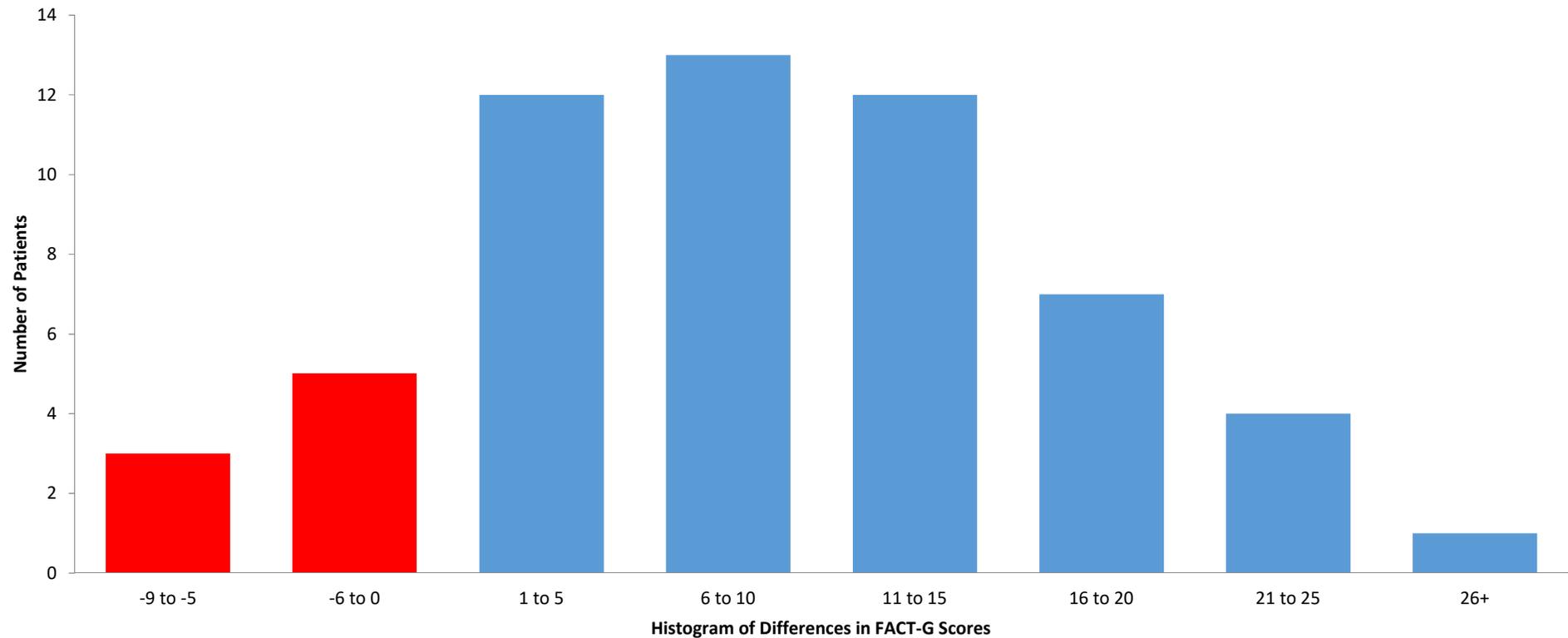
- fatigue
- poor sleep
- anxiety / depression
- decreased strength & endurance
- decreased balance
- chemotherapy induced peripheral neuropathy (CIPN)
- decreased bone mineral density (BMD)
- type 2 diabetes (T2DM)
- weight loss / gain

Retrospective audit of patient discharge letters - Comorbidities:

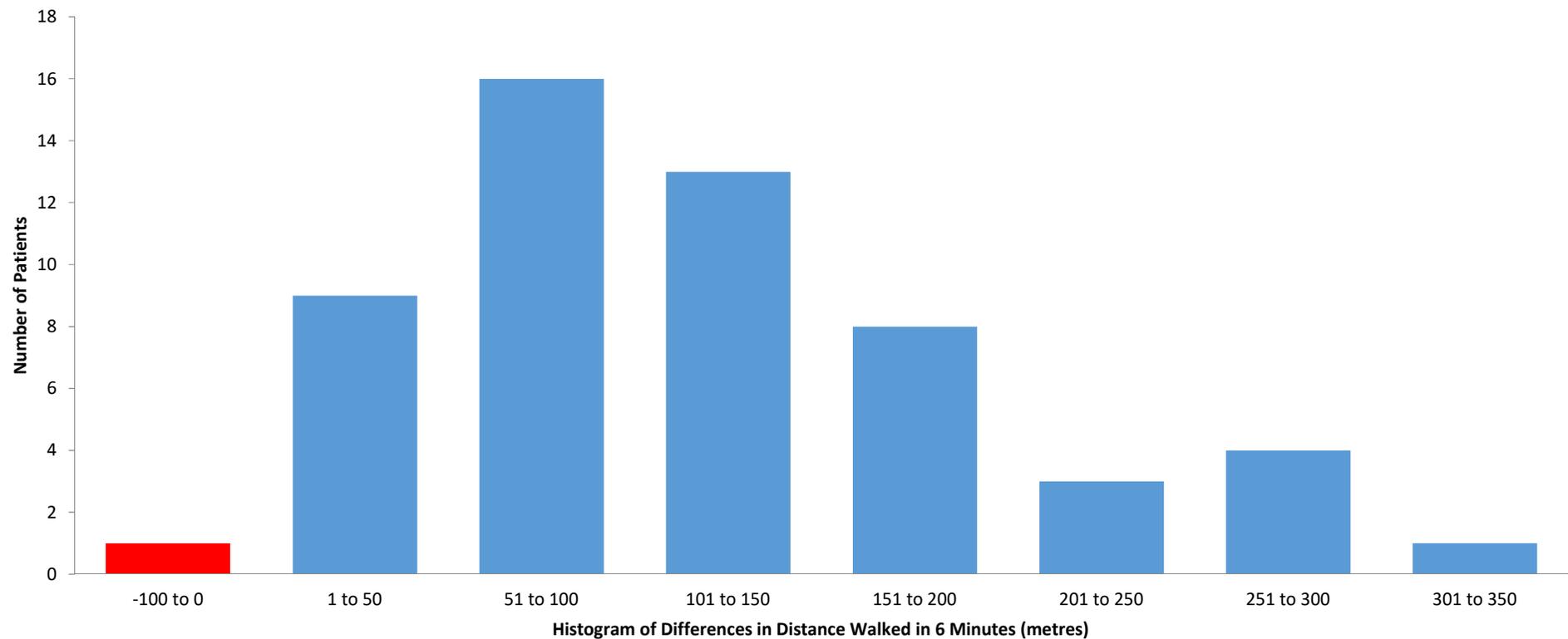
- osteoarthritis / joint pain
- T2DM
- cardiovascular disease
- hypertension
- hypercholesterolaemia
- current smoker / ex-smoker
- decreased BMD
- decreased balance
- decreased vision
- anxiety / depression
- other cancer(s)
- social issues (e.g. isolation)

Change in FACT-G (Functional Assessment of Cancer Therapy – General) wellbeing score from before to after the program

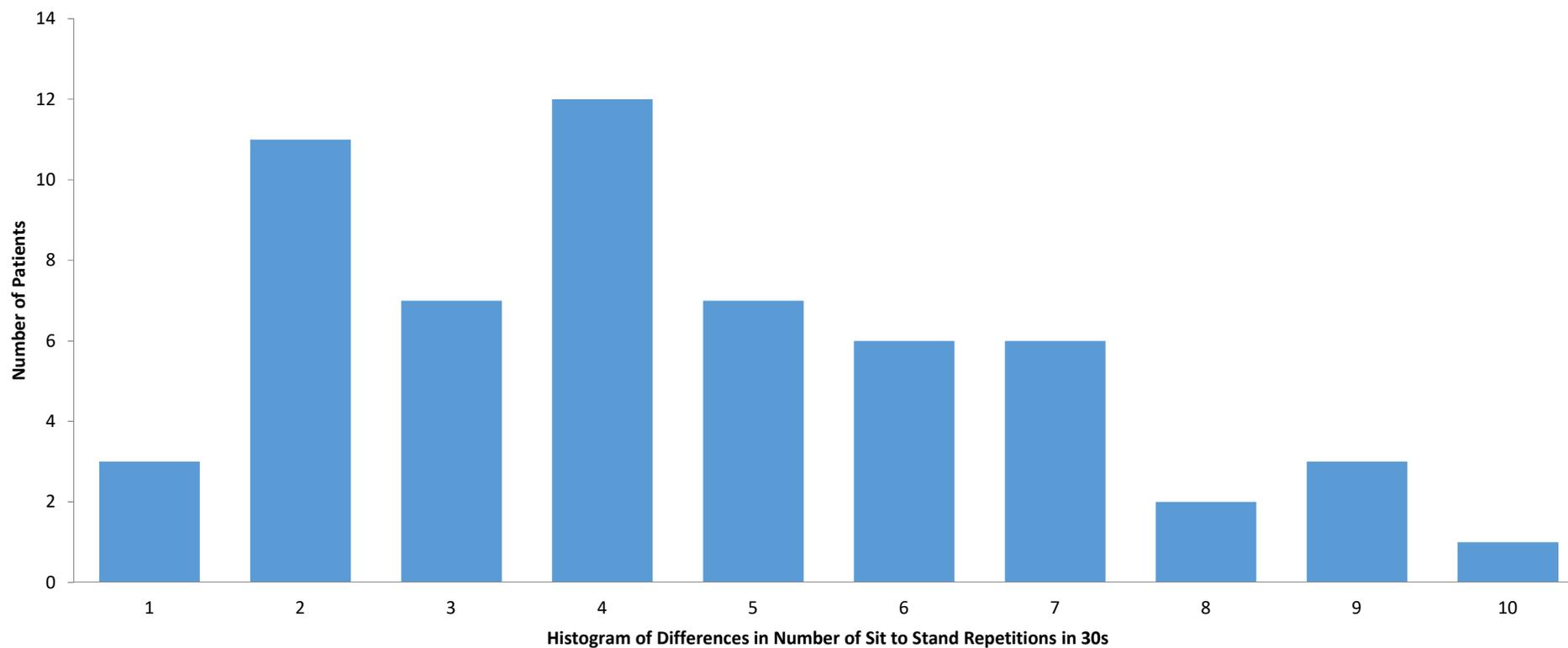
n=57, mean change = +9 points, p (paired samples t-test) < 0.001



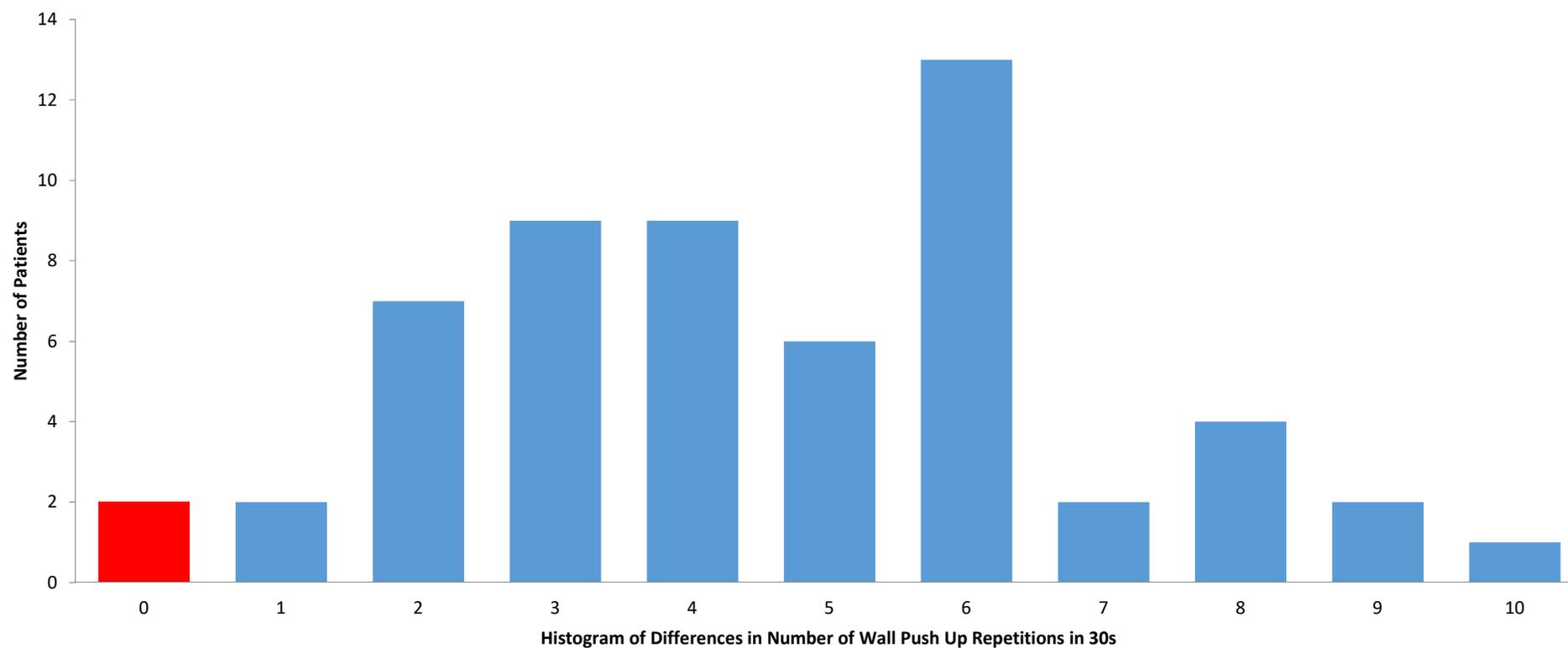
Change in distance walked in 6 minutes from before to after the program
n=55, mean change = +128 metres, p (paired samples t-test) < 0.001



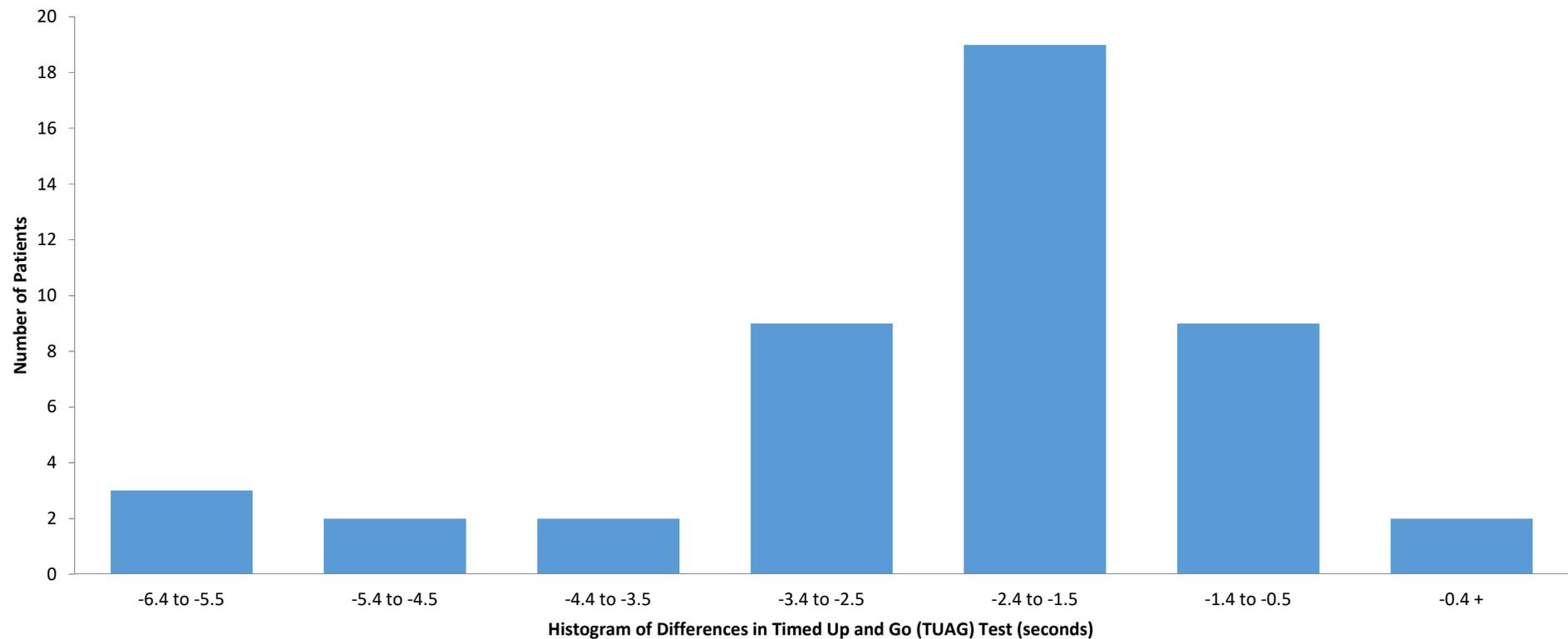
Change in number of sit to stand repetitions in 30 seconds from before to after the program
n=58, mean change = +4.5, p (Wilcoxon signed-rank test) < 0.001



Change in number of wall push up repetitions in 30 seconds from before to after the program
n=57, mean = +4.6, p (Wilcoxon signed-rank test) < 0.001



Change in timed up and go (TUAG) test (seconds) from before to after the program
n=46, mean = -2.4, p (Wilcoxon signed-rank test) < 0.001



How does this model meet the needs of Cancer Survivors?

- Accommodates patients
- Individualised
- Group education characteristics
- Self-management in the context of a chronic disease
- Senior allied health staff including a psychologist
- Routine quality improvement
- Patient feedback

Conclusion:

Cancer survivors' physical, functional and psychosocial health outcomes improved significantly following completion of the SJOG Bendigo Hospital oncology rehabilitation program.

Cancer is the new frontier in chronic disease management.

What does allied health have to offer?
Rehabilitation – it's what we do.



Clinical practice guidelines:

- www.cancervic.org.au/
- www.petermac.org/
- www.cosa.org.au/

References:

- www.facit.org/FACITOrg/Overview
- <https://www.canceradvocacy.org/news/defining-cancer-survivorship/> 2014; accessed 16-3-2017
- <http://www.abc.net.au/news/2017-02-04/new-cancer-treatments-creating-tsunami-of-survivors/8241556> accessed 16-3-2017
- <https://www.cancer.gov/news-events/cancer-currents-blog/2016/cancer-silver-tsunami> accessed 16-3-2017
- Dennett, AM., Peiris, CL., Shields, N., Morgan, D., Taylor, NF. 2016. Exercise therapy in oncology rehabilitation in Australia: A mixed-methods study. *Asia-Pacific Journal of Clinical Oncology*. Online; DOI: 10.1111/ajco.12642
- Cata, JP., Zhang, H., Humid, B., Giralt, S., Burton, AW., Dougherty, PM. Mechanisms of chemotherapy-induced neuropathic pain. In; Paice, JA., Bell, RF., Kalso, EA., Soyannwo, OA. (eds) 2010. *Cancer Pain; From molecules to suffering*. IASP Press. Seattle
- Wang, XS., Cleeland, CS. Symptoms that cluster around cancer pain: A research agenda. 2006. *IASP Clinical Updates*; Vol 14, issue 5
- Stepanski, EJ., Walker, MS., Schwartzberg, LS., Blakely, LJ., Ong, JC., Houts, AC. 2009. The relation of trouble sleeping, depressed mood, pain and fatigue in patients with cancer. *Journal of Clinical Sleep Medicine*; Vol 5, No 2:132-136
- Silver, JK., Baima, J., Mayer, RS. 2013. Impairment-driven cancer rehabilitation: An essential component of quality care and survivorship. *CA: A Cancer Journal for Clinicians*; Vol 63, No 5:296-317
- McCorkle, R., Ercolano, E., Lazenby, M., Schulman-Green, D., Schilling, L., Lorig, K., Wagner, E. 2011. Self-management: enabling and empowering patients with cancer as a chronic illness. *CA: A Cancer Journal for Clinicians*; 61:50-62
- Silver, JK., Gilchrist LS. 2011. Cancer rehabilitation with a focus on evidence-based outpatient physical and occupational therapy interventions. *American Journal of Physical Medicine & Rehabilitation*;90(suppl):S5-S15