

ComeBACK

Coaching and Exercise for
Better Walking

for adults with walking limitations: a randomised controlled trial

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A research partnership between Sydney Local Health District and the University of Sydney in musculoskeletal health and physical activity



THE UNIVERSITY OF
SYDNEY



Health
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Local Health District

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Project grant 2018

Background



Source: Google images

Aim & Design



Source: Google images

3-arm RCT (hybrid effectiveness-implementation type 1)

Telephone
coaching
intervention
package
(Coaching)

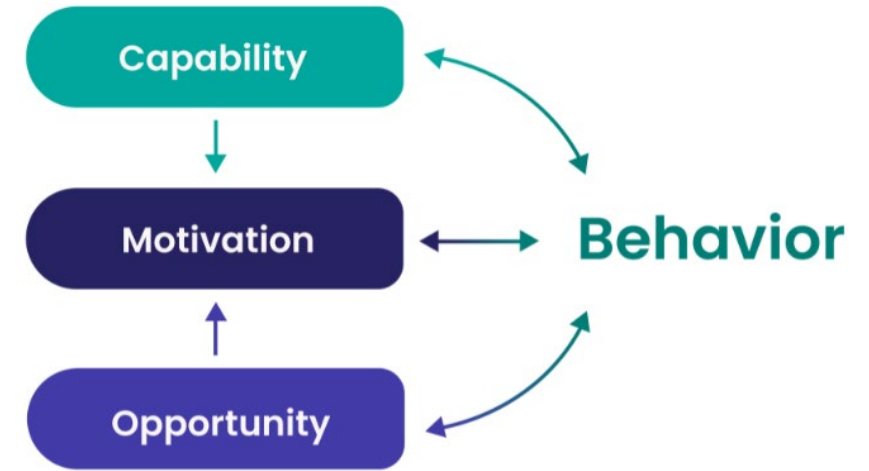
Text
messaging
intervention
package
(Texting)

Waitlist
control

Effect on physical activity among adults
with walking limitations

Interventions

- Informed by:
 - Formal and informal input
 - Current evidence
 - Behaviour change theory
 - Implementation science (PRACTIS guide)



Coaching

- Physiotherapy assessment
- Fortnightly telephone coaching by physiotherapists
 - Motivational interviewing, behavioural change techniques, goal setting
- Wearable devices & Apps



Texting

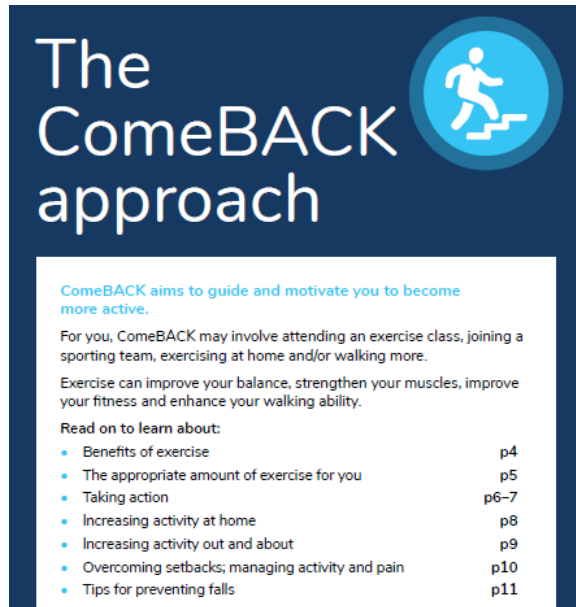
- Single telephone coaching session
- Text messages
 - Unidirectional, prescheduled
 - Some personalisation
 - 5x week - options to increase/decrease/stay the same or stop



Set realistic exercise goals each week and plan the steps you'll need to reach them

Interventions: both groups

Education booklet



The ComeBACK approach

ComeBACK aims to guide and motivate you to become more active.

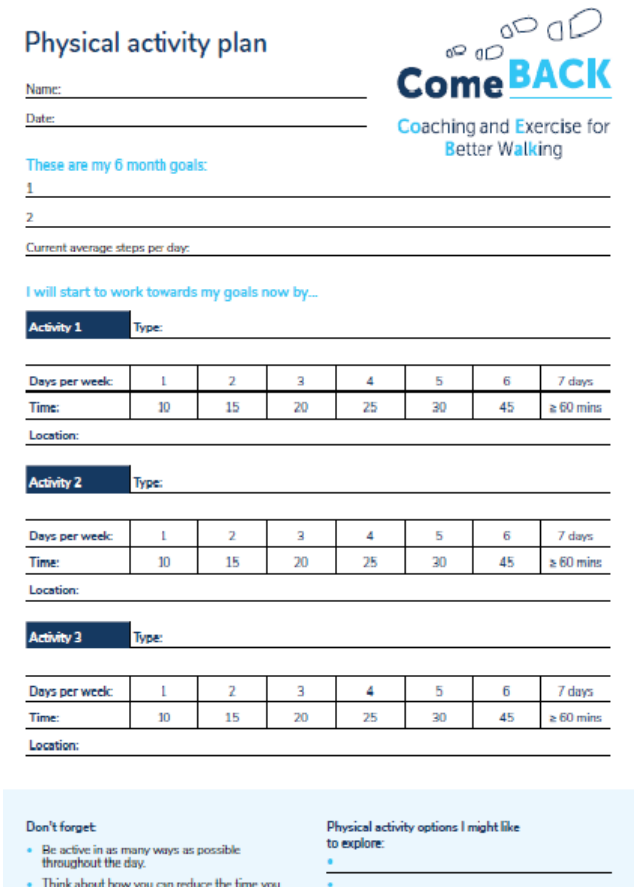
For you, ComeBACK may involve attending an exercise class, joining a sporting team, exercising at home and/or walking more.

Exercise can improve your balance, strengthen your muscles, improve your fitness and enhance your walking ability.

Read on to learn about:

- Benefits of exercise p4
- The appropriate amount of exercise for you p5
- Taking action p6-7
- Increasing activity at home p8
- Increasing activity out and about p9
- Overcoming setbacks; managing activity and pain p10
- Tips for preventing falls p11

Physical activity plan



Physical activity plan

Name: _____

Date: _____

These are my 6 month goals:

1 _____

2 _____

Current average steps per day: _____

I will start to work towards my goals now by...

Activity 1 Type: _____

Days per week:	1	2	3	4	5	6	7 days
Time:	10	15	20	25	30	45	≥ 60 mins

Location: _____

Activity 2 Type: _____

Days per week:	1	2	3	4	5	6	7 days
Time:	10	15	20	25	30	45	≥ 60 mins

Location: _____

Activity 3 Type: _____

Days per week:	1	2	3	4	5	6	7 days
Time:	10	15	20	25	30	45	≥ 60 mins


Location: _____

Don't forget:

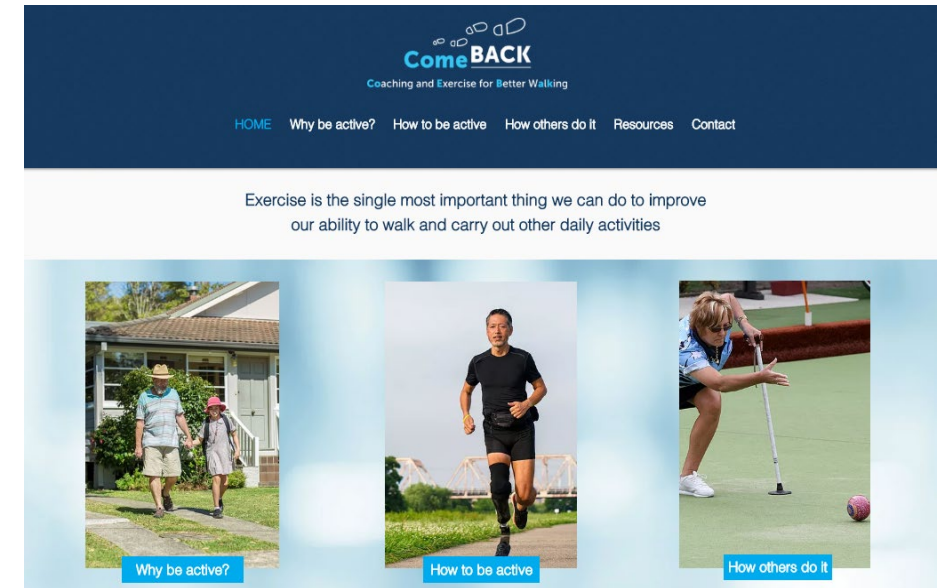
- Be active in as many ways as possible throughout the day.
- Think about how you can reduce the time you

Physical activity options I might like to explore:

- _____
- _____



Access to closed website





ComeBACK


Coaching and Exercise for Better Walking

[HOME](#) [Why be active?](#) [How to be active](#) [How others do it](#) [Resources](#) [Contact](#)

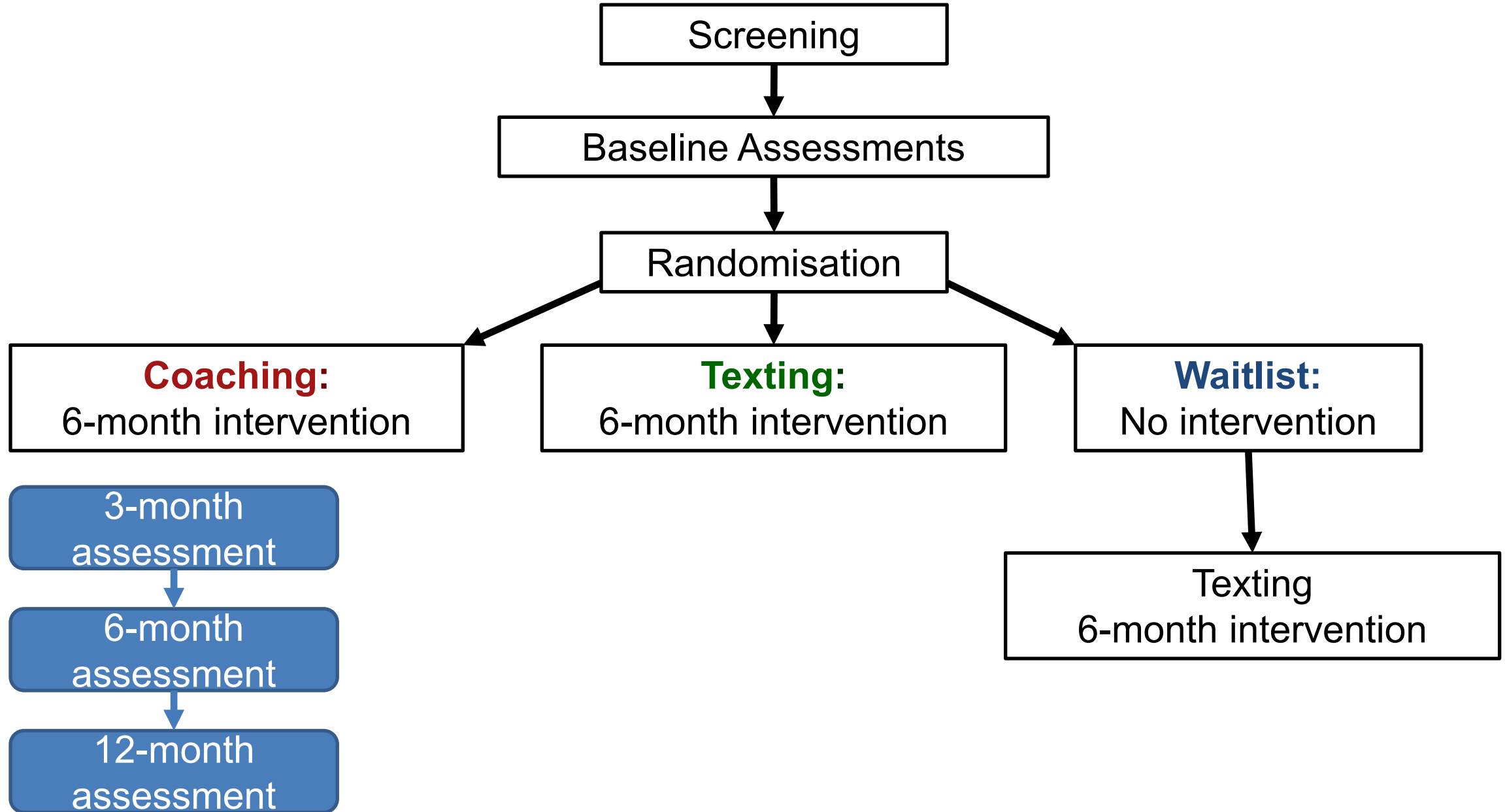
Exercise is the single most important thing we can do to improve our ability to walk and carry out other daily activities

Why be active? 

How to be active 

How others do it 

Study design



Participants



Source: Google images

Inclusion criteria

- Community-dwelling
- Difficulty walking 800m
- Can leave home without assistance
- No major cognitive impairment
- Sufficient hearing and English language skills

Exclusion criteria

- Residential aged care facilities
- Medical conditions which PA is not recommended
- Neurological degenerative conditions
- Fulltime wheelchair dependent
- Meeting physical activity guidelines
- Unable to wear *StepWatch*
- Not regular mobile phone user / no internet access

Outcome measures

Primary outcome: Physical activity (device-measured)

Average steps per day over a one-week period at **6 months**

Secondary outcomes: 3, 6 and/or 12 months

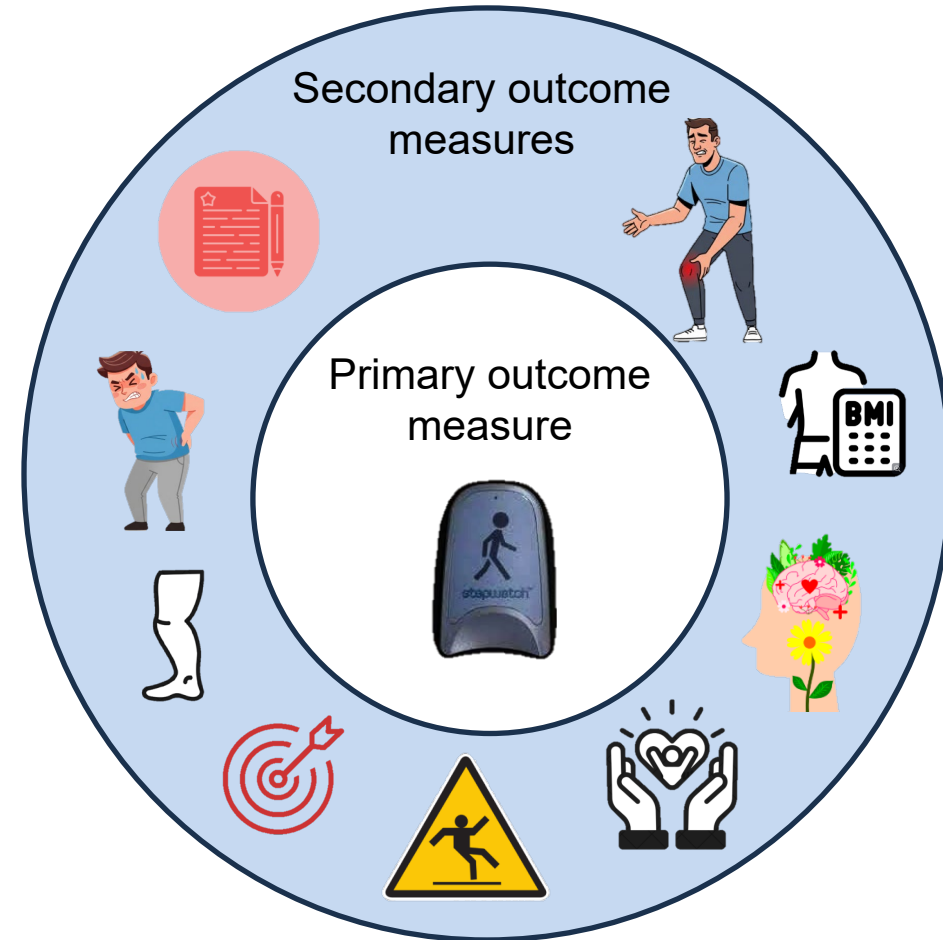
- General health and function (e.g., BMI, pain, lower limb function and disability, GAS)
- Physical activity (self-reported measures; e.g., IPEQ)
- Quality of Life
- Mental Wellbeing
- Falls (monthly calendars)



StepWatch activity monitor

Secondary outcomes

- Generally modest effects
- 95% confidence intervals often included 0
 - 12 months
 - Coaching vs Texting



Other secondary outcomes

- No between-group differences in falls
- No serious adverse events reported



Source: Google images

Conclusions

Telephone coaching: clinically meaningful increases in PA for adults with walking limitations

Coaching vs Texting:

- Responsiveness to evolving barriers
- Personal connection with coach

→ Coaching:

- Physiotherapy-delivered
- Individualised, flexible
- Behaviour change theory
- Beyond brief counselling → follow-up, community integration, self-monitoring strategies
- Social, cultural, environmental factors



Source: Google images

Future research

- Long-term effects of coaching interventions
- Participant diversity
- Process evaluation, economic analysis, mediation analysis



Source: Google images

Come **BACK**

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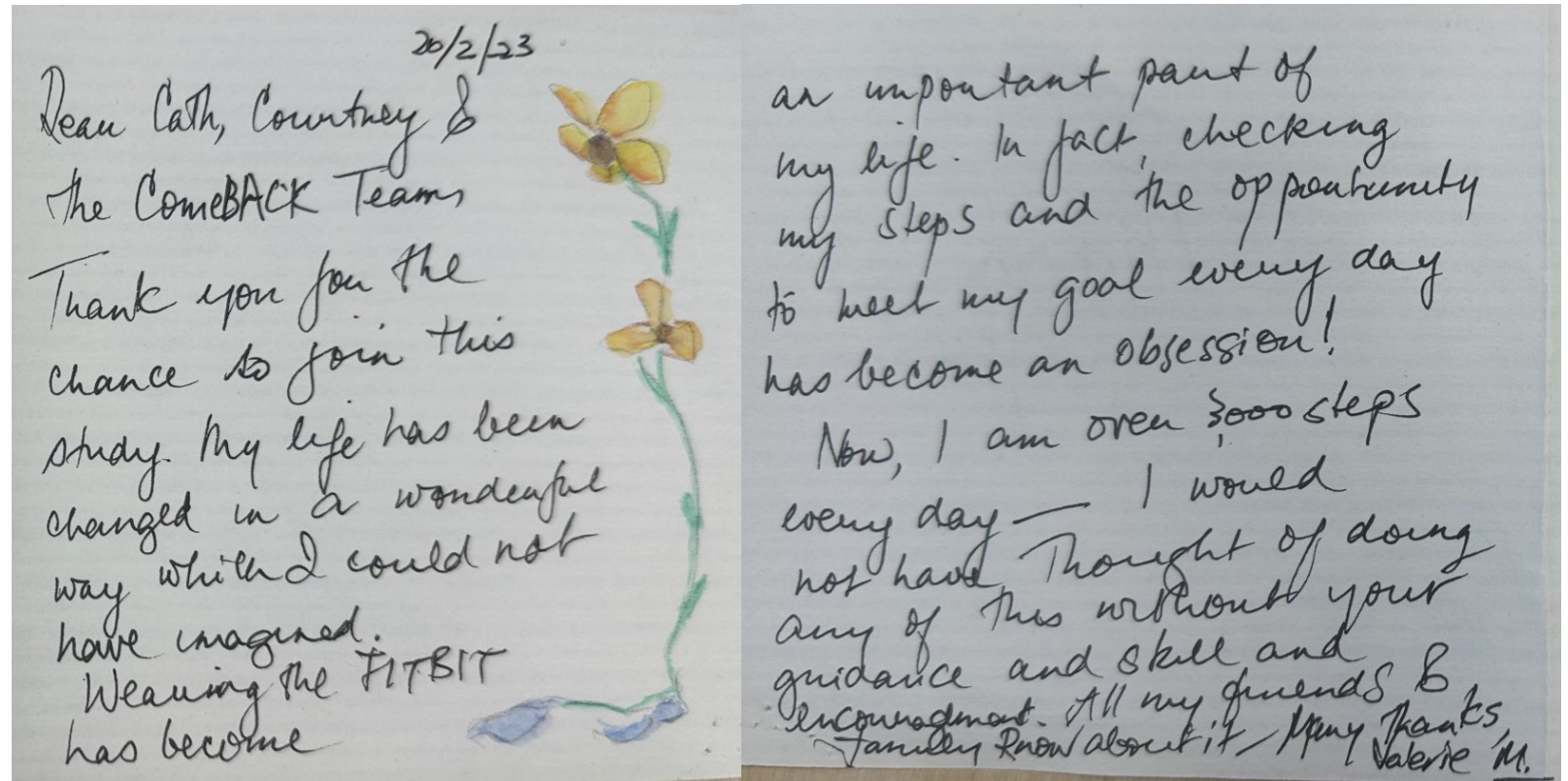
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