Project Title

Cloud Based Training Material Enhances E-CART Training Efficiency

Project Lead and Members

Project lead: Lim KC

Project members: E Farrock, Teo YL, Lim ZXL

Organisation(s) Involved

Ng Teng Fong General Hospital

Healthcare Family Group Involved in this Project

Allied Health

Applicable Specialty or Discipline

Physiotherapy

Aims

The aim of this quality improvement project is to put clinical hours to better use by reducing the time spent in E-Cart checking training by 25%.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

Easily accessible TM (e-slides, videos) enhances training and may substitute face to face training. It put healthcare man hours to better use.

Conclusion

See poster appended/ below

Project Category

Training & Education

Education Platform

Keywords

Cloud Based Learning, Checking E-Cart, Reducing Training Time, E-Learning

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CLOUD BASED TRAINING MATERIAL ENHANCES E-CART TRAINING EFFICIENCY

√ SAFETY √ PRODUCTIVITY
√ QUALITY √ COST
❑ PATIENT EXPERIENCE

LIM KC, E FARROCK, TEO YL, LIM ZXL
PHYSIOTHERAPY, REHABILITATION DEPARTMENT, NG TENG FONG GENERAL HOSPITAL

Problem, Aim

Problem/Opportunity for Improvement
E-Cart check training requires high manpower needs and clinical/after work hours. Unfamiliar with the items in the E-Cart makes training lengthy for Rehabilitation Department staff who are trained to check E-Carts.

Aim
The aim of this quality improvement project is to put clinical hours to better use by reducing the time spent in E-Cart checking training by 25%.
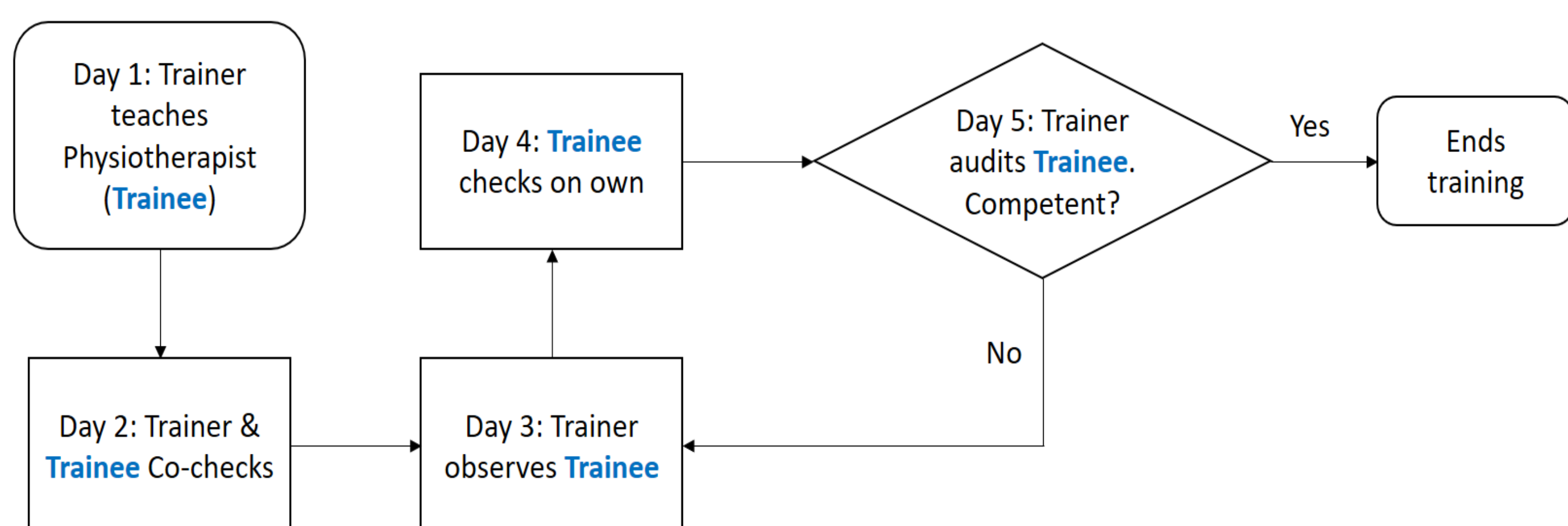
Current Process

Time spent in training one Physiotherapist (PT) to check E-Cart
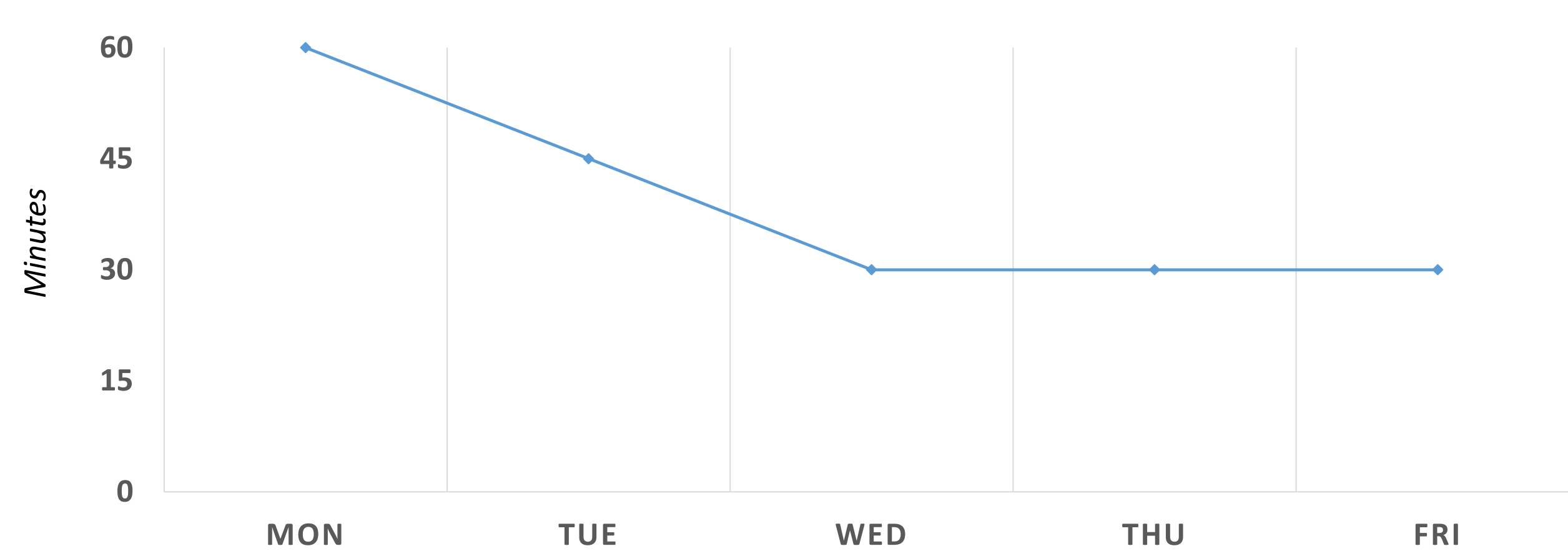
	MON	TUE	WED	THU	FRI
Trainer	60 min	45 min	30 min	0 min	30 min
Trainee (PT)	60 min	45 min	30 min	30 min	30 min
Total Man Hours	120 min	90 min	60 min	30 min	60 min

Analysis

E-cart training regime before intervention

- Day 1: Trainer teaches Physiotherapist (Trainee)
- Day 2: Trainer & Trainee Co-checks
- Day 3: Trainer observes Trainee
- Day 4: Trainee checks on own
- Day 5: Trainer audits Trainee. Competent? Yes → Ends training / No → back to Day 3
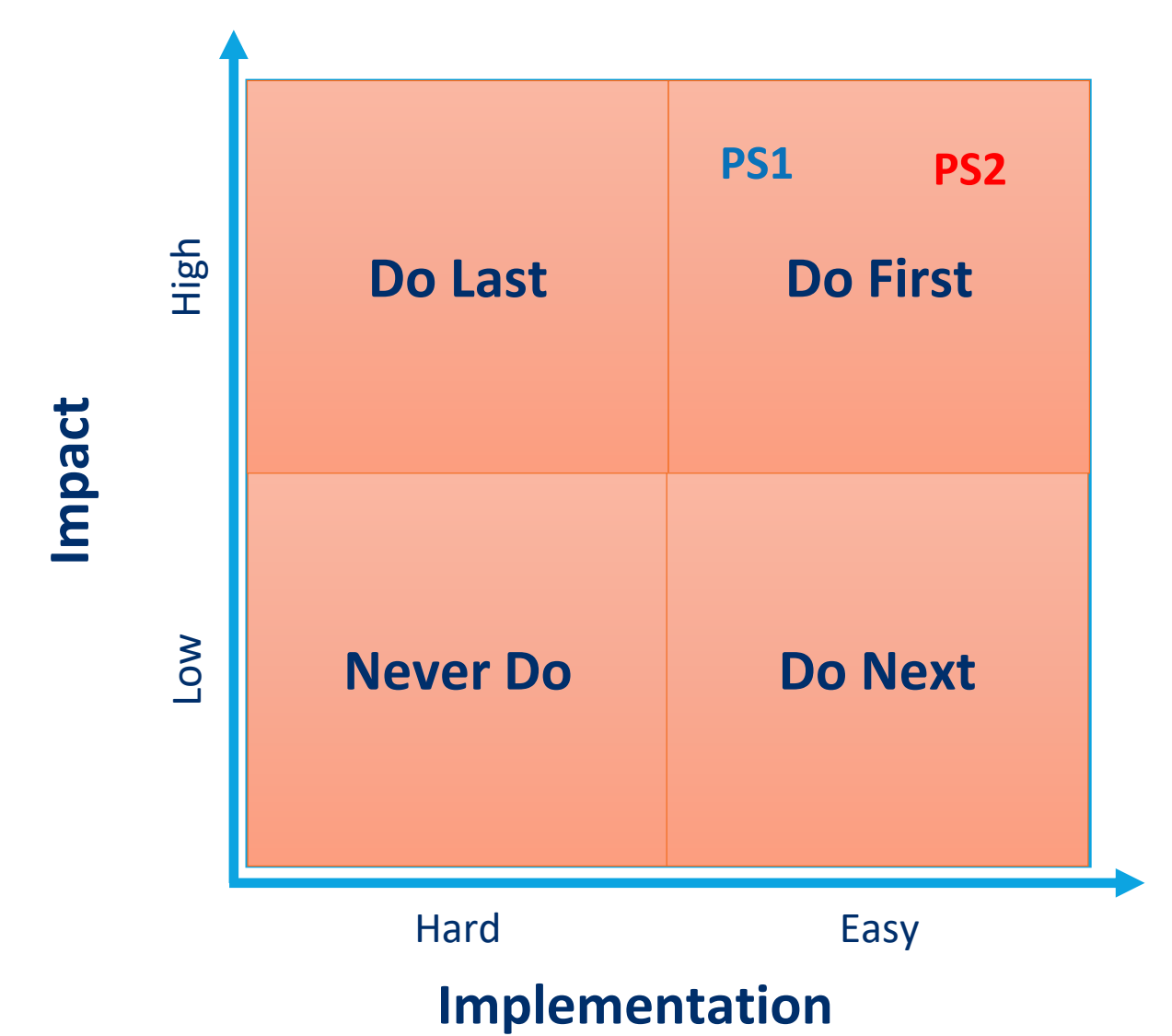
Brainstorming

Day	Problems identified
1	120 minutes of clinical/after hours spent. Lack of e-learning/ resources. Lack of training materials/resource for post training reference.
2	90 minutes of clinical/after hours spent. Lack of training materials/resource for reference to substitute trainer & tackle unfamiliarity with items in E-Cart.
3	60 minutes of clinical/after hours spent. Lack of training materials/resource for reference to substitute trainer & tackle unfamiliarity with items in E-Cart.
4	Nil. Reasonable time spent.
5	Nil. Reasonable time spent for audit.

Changes

| Root Cause		Potential Solutions
Lack of training material/ resource to aid/enhance training	1	**Develop E-learning videos**
	2	*Post training training material (TM)*

Prioritisation matrix — Impact (High/Low) vs Implementation (Hard/Easy): Do Last, Do First (PS1, PS2), Never Do, Do Next

Test & Implement Changes

Tested on Potential Solution 2 – Post training TM

CYCLE	PLAN	DO	STUDY	ACT
1 (August 2020)	Team developed hard copy TM to be introduced from day 1	3 trainees (new to E-Cart) feedback that 1) TM helps to identify items 2) Hard copy TM are not convenient for reference after work hours	1) TM enhances training 2) Trainer may not be required from Day 2 to 4 3) Storage of TM in cloud allows easy access	To develop a cloud based TM to replace hard copy TM. Removes trainer from Day 2 to 4.
2 (February 2021)	Team redeveloped cloud based TM (pdf format). Removes trainer from Day 2 to 4. Keep Day 5 for competency check	3 trainees (new to E-Cart) feedback that 1) TM helps to identify items 2) Cloud based TM allows easy access and revision on the go	1) TM reduces trainer contact time 2) Trainees find cloud base TM easy to access on the go 3) Learning is less stressful	To adopt cloud based TM

Avg Time* spent in training one PT Trainee to check E-Cart

PDSA Cycle 2
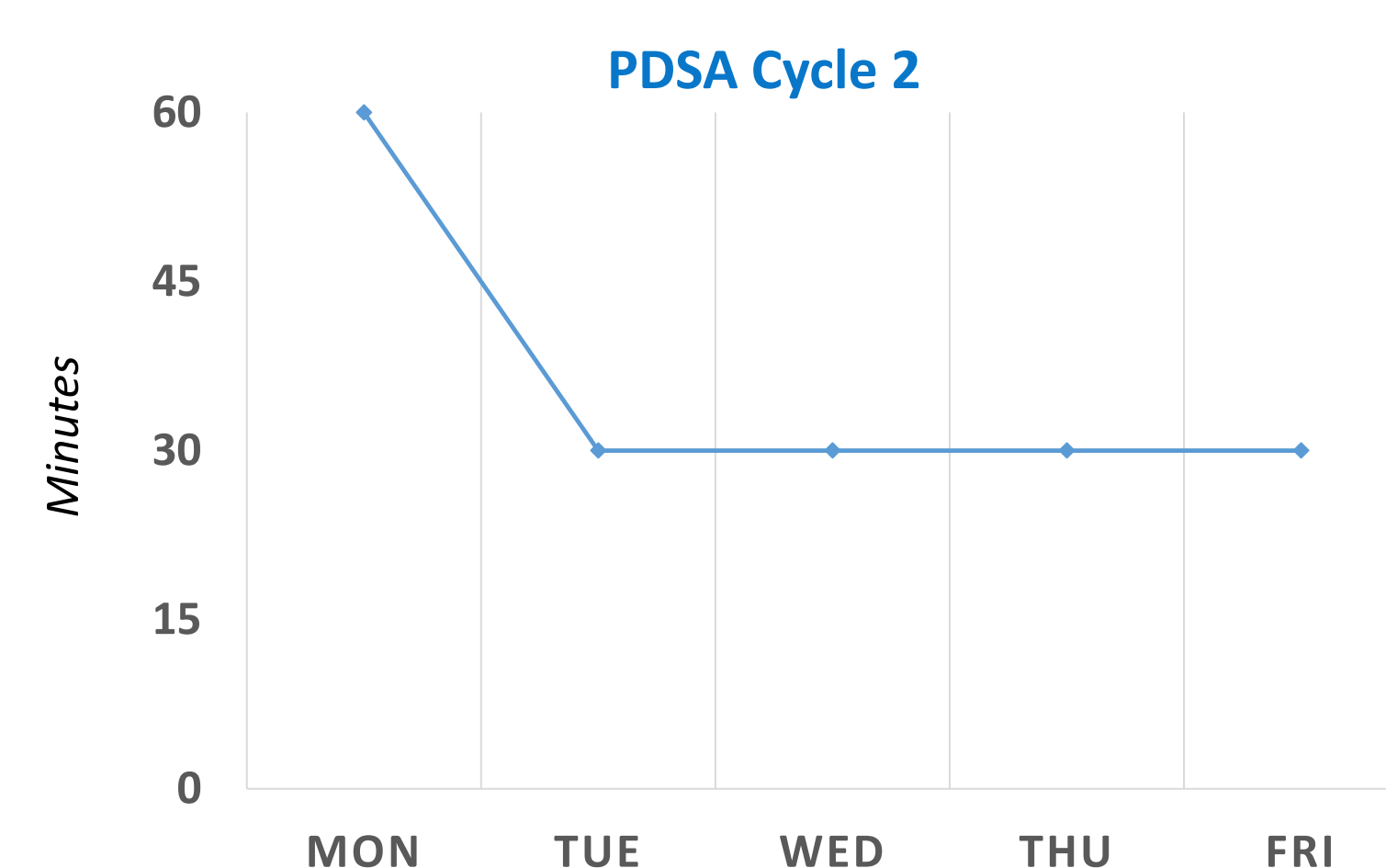
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Trainee*	60 min	30 min	30 min	30 min	30 min
Total Man Hours	120 min	30 min	30 min	30 min	60 min

Saves 90 minutes of total man hours (25%)

Spread Changes, Learning Points

What are/were the strategies to spread change after implementation?
The team intends to share the cloud based TM and training regime within Rehab, with the HODs. This implementation of a cloud based TM can also be considered by other departments who check E-Carts.

What are the key learnings from this project?
Easily accessible TM (e-slides, videos) enhances training and may substitute face to face training. It put healthcare man hours to better use.

Ng Teng Fong General Hospital

Jurong Community Hospital