



# Protect your feet:

## Know the early warning signs.



SingHealth

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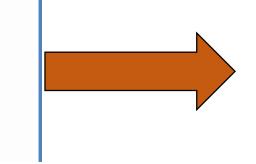
Team Member: Dr Dhanaletchimy D/O Kagradaimdoo, SSN Wah Julie Anika Facilitators: Dr Hwang Siew Wei, Dr Sabrina Wee, Dr Neelakshi Dilmini.

#### Introduction

At Singhealth Polyclinics, Diabetes Foot Screening (DFS) is performed annually for new and follow-up patients with diabetes. All nurses was trained and competent to provide Foot Screening and detect diabetic foot related complications.

#### 2875

 Total attendance of DM foot screening patient 5 months (May to September 2018)



1985 were found to be having foot complications.

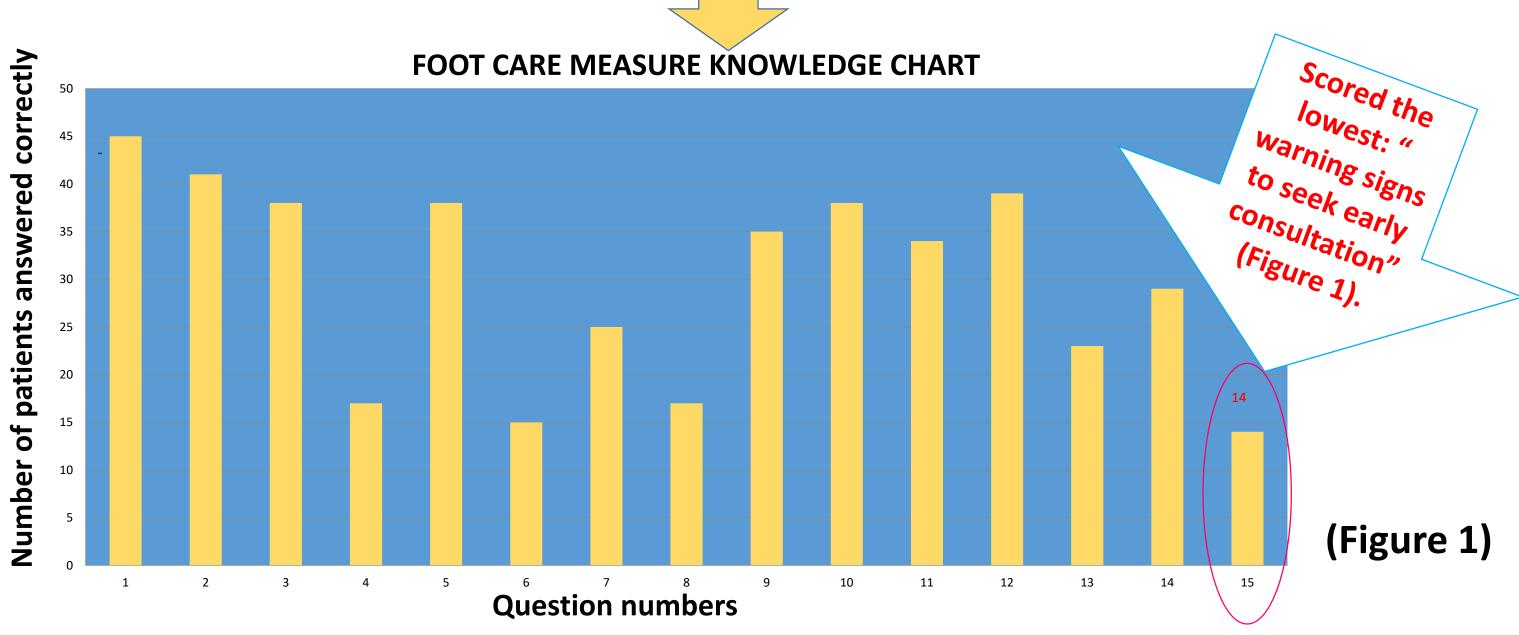
### Problem

The team observed that some diabetic patients are not fully aware of the warning signs on foot complications and late presentation which increased risk to limb amputation.



A face to face interview - **50** patients diabetes mellitus (DM) at Bukit Merah Polyclinic.

> Utilized validated questions to assess patients' knowledge on foot care. (Figure 1).



### Aim

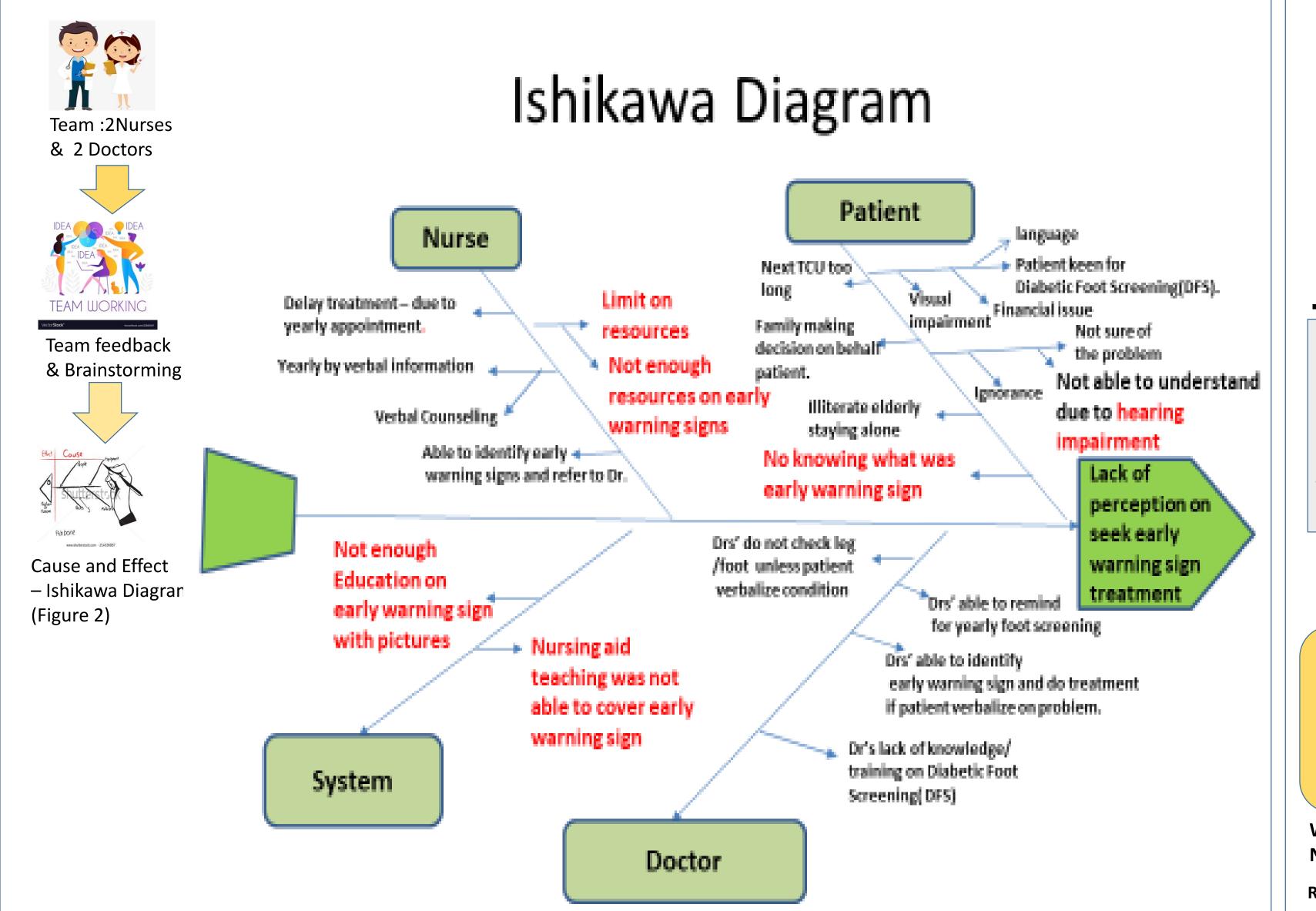


To assess patient's knowledge of early warning signs of diabetic foot complication



To generate awareness among diabetic patients on early warning signs of foot complications.

## Methodology



As shown in Figure 2: Three main key factors were identified during the feedback session.



1. Insufficient pictorial teaching materials to educate the warning signs.



2. Lack of knowledge about diabetic foot complications.



3. Inadequate time for doctors to examine patients' feet due to high volume of patient seen daily.

After brainstorming on the main factors identified, team members agreed to address factor number 1: Insufficient pictorial teaching materials to educate the warning signs.

### Intervention

#### **Educational Flip Chart**

The effectiveness: tested on 50 other patients with Diabetes







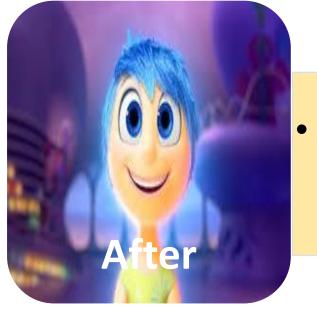


#### Result



 Before using the pictorial Flip Chart: 50 Diabetic patients' have **no knowledge** on warning signs.

After teaching, a post questionnaire on 50 patients.



 All 50 patients gave feedback that they had gained knowledge.

Pre **Post Question 15** Question Question

Warning signs for which consultation is required.

Knowledge

50 patients Gained Knowledge

#### Conclusion

Using the pictorial Flip Chart in diabetic foot education is effective in increasing patient's knowledge and awareness of early warning signs of diabetic foot complications. With this, we hope to reduce the risk of late and severe diabetic foot complications and the risk of lower limb amputations.

#### Future

Continuous teaching and monitoring on flip chart on early warning signs for diabetic patient in Diabetic Foot Screening Service Room – on going.

We would like to thank: Adviser Dr Hwang Siew Wai (Director of Bukit Merah Polyclinic), AD Tan Ai Ming, NM Tan Joo See, NM Ng Lay Peng

References: 1. Muhammad – Lufti, et al; Malaysian Orthopaedic Journal. (Malays Orthop J 2014 Nov; 8(3): 22-26. doi: 10.5704/MOJ.1411.005. adopted from Hasnain S. et al.

2. Ang Y, et al. Diabetes-related lower extremity amputations in Singapore. NHGP, Singapore. Proceedings of Singapore Healthcare 2017, Vol-26(2) 76-80.

#### (Figure 2)