

Promoting Smoking Cessation in Patients with Non-Traumatic Lower Limb Amputations A Quality Improvement Initiative



Carmen Baker, MD & Ali Bateman, MD (supervisor)
Centre for Quality, Innovation, and Safety, Schulich School of Medicine & Dentistry,
Western University, London, ON, Canada

PROBLEM & AIM

Problem: Smoking cessation is critical to reducing future amputations, but individuals with non-traumatic amputations do not frequently receive comprehensive smoking cessation counselling.

- Smoking is the leading cause of non-traumatic amputation.
- Smoking cessation reduces the risk of amputation & reamputation.

Aim: To increase the percentage of individuals with non-traumatic amputations who receive comprehensive smoking-cessation counselling in the Parkwood Institute Amputee Rehab Program by 50% by July 30, 2022.

ROOT CAUSE ANALYSIS

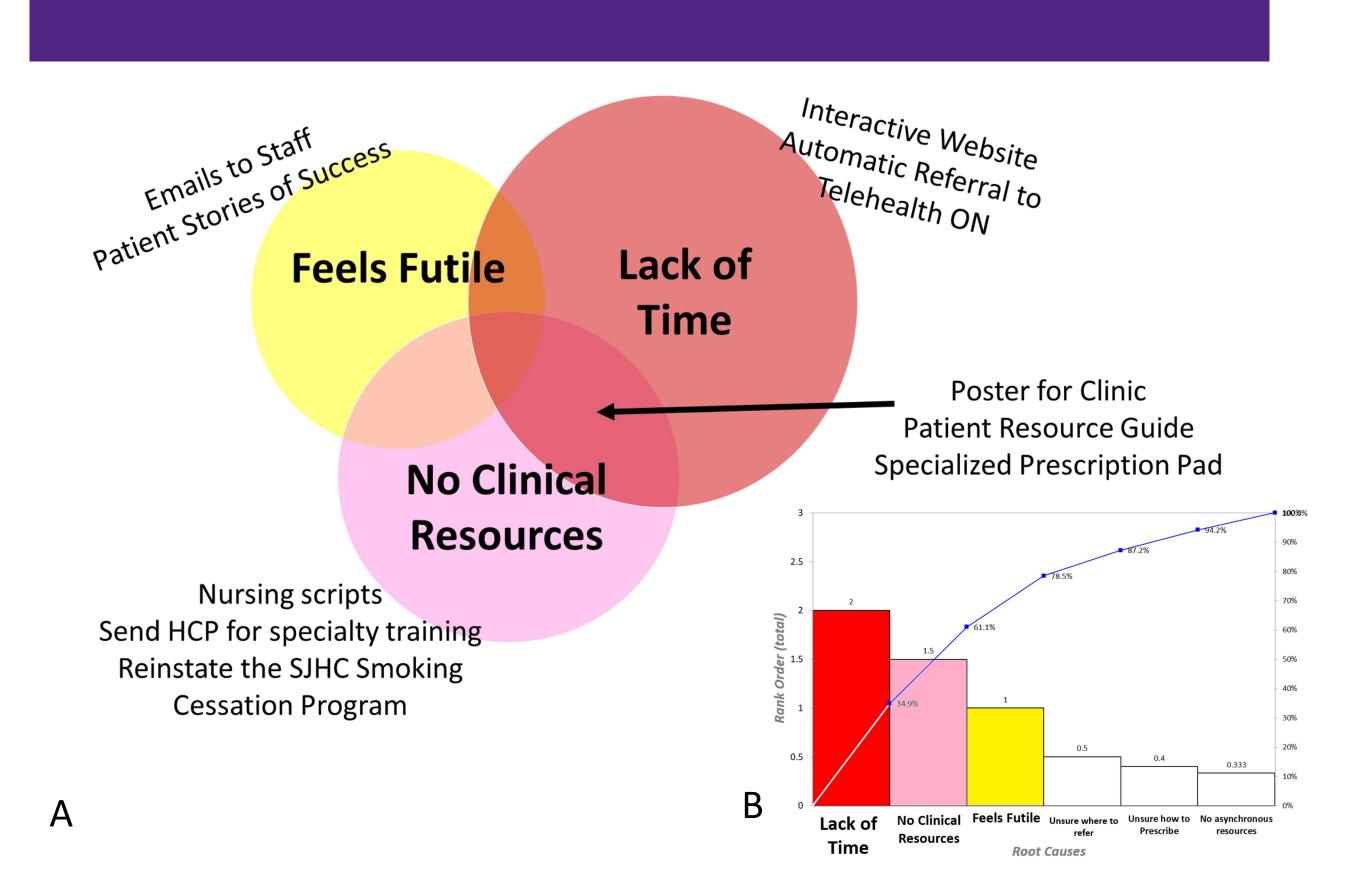


Figure 1: Root Cause Analysis. A) Key root causes & proposed change ideas.

B) Pareto Chart. Stakeholders: hospitalists, physiatrists, inpatient & outpatient nurses.

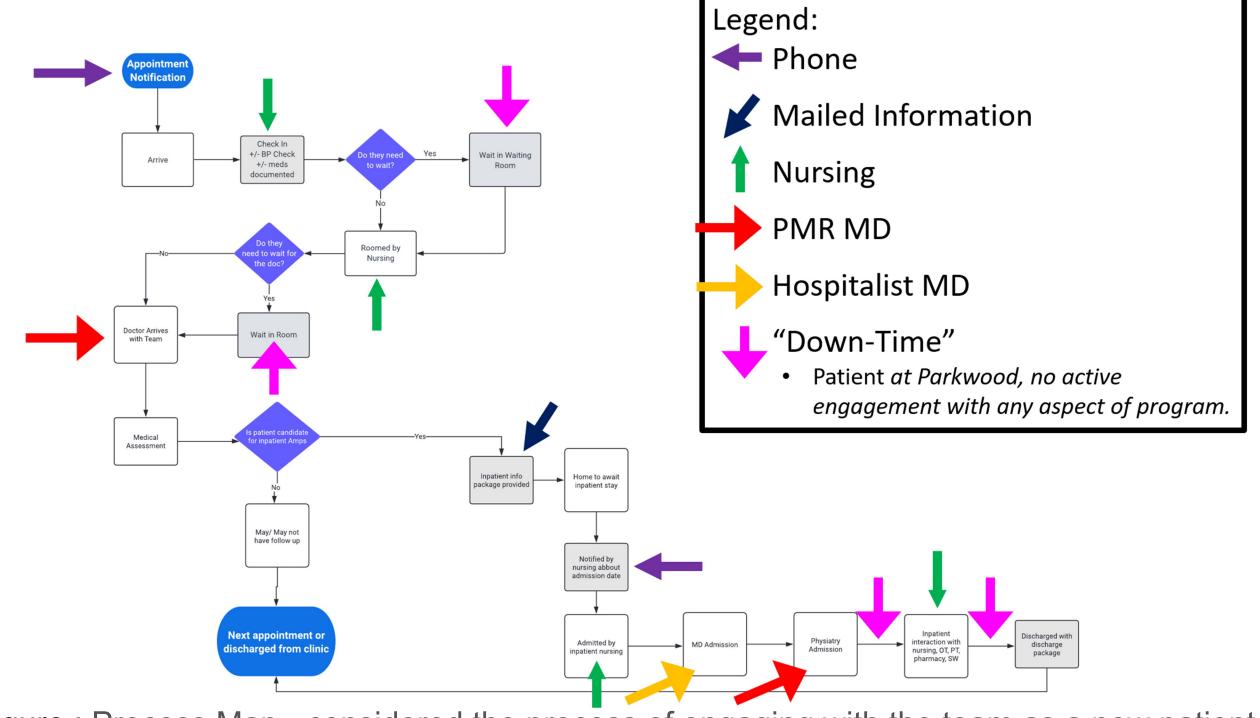


Figure: Process Map - considered the process of engaging with the team as a new patient - identified potential interaction points for opportunity to "add" to care.

PDSA CYCLE #1

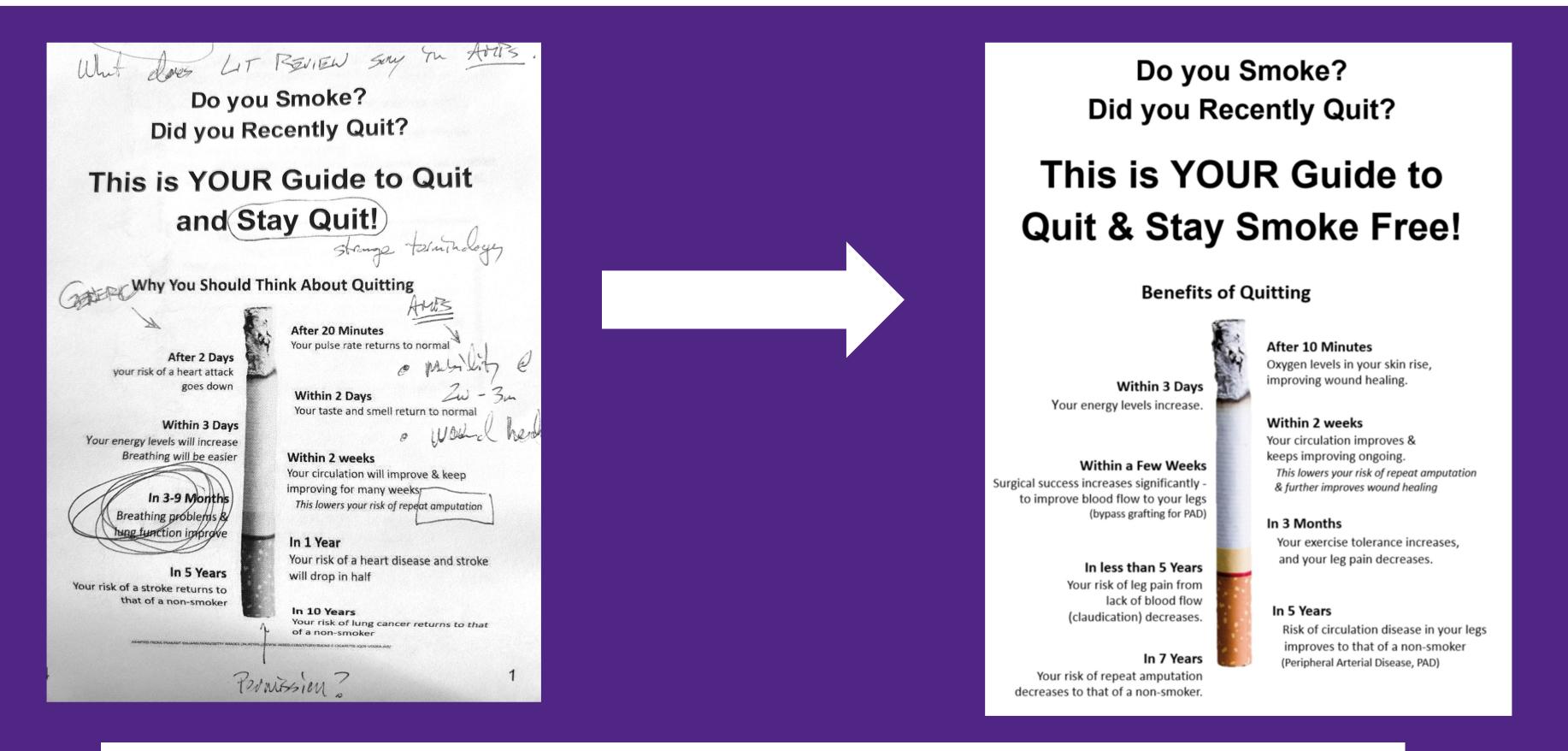


Figure 3: Implementing feedback to specifically focus on amputation.

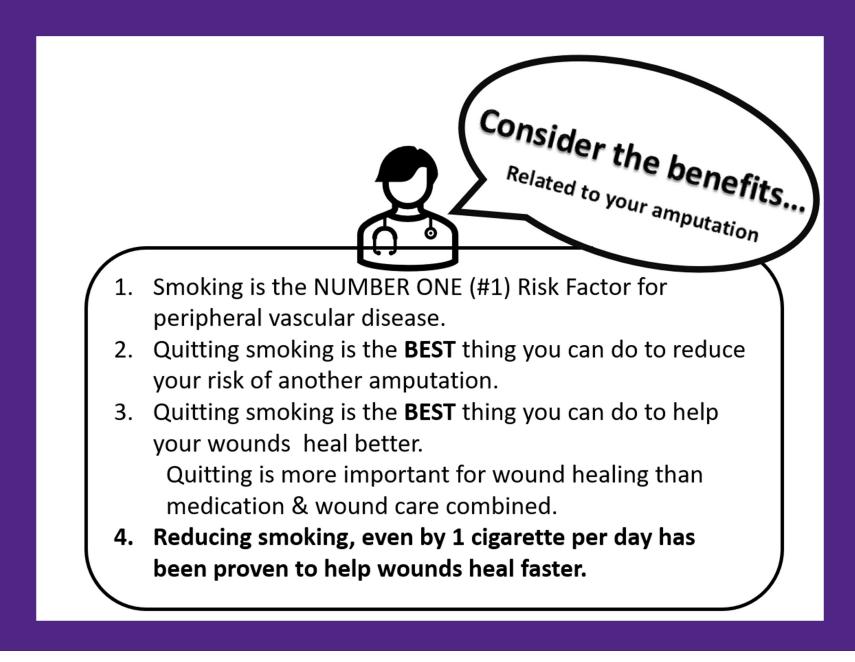


Figure 4: Implementing feedback to add amputation-specific information

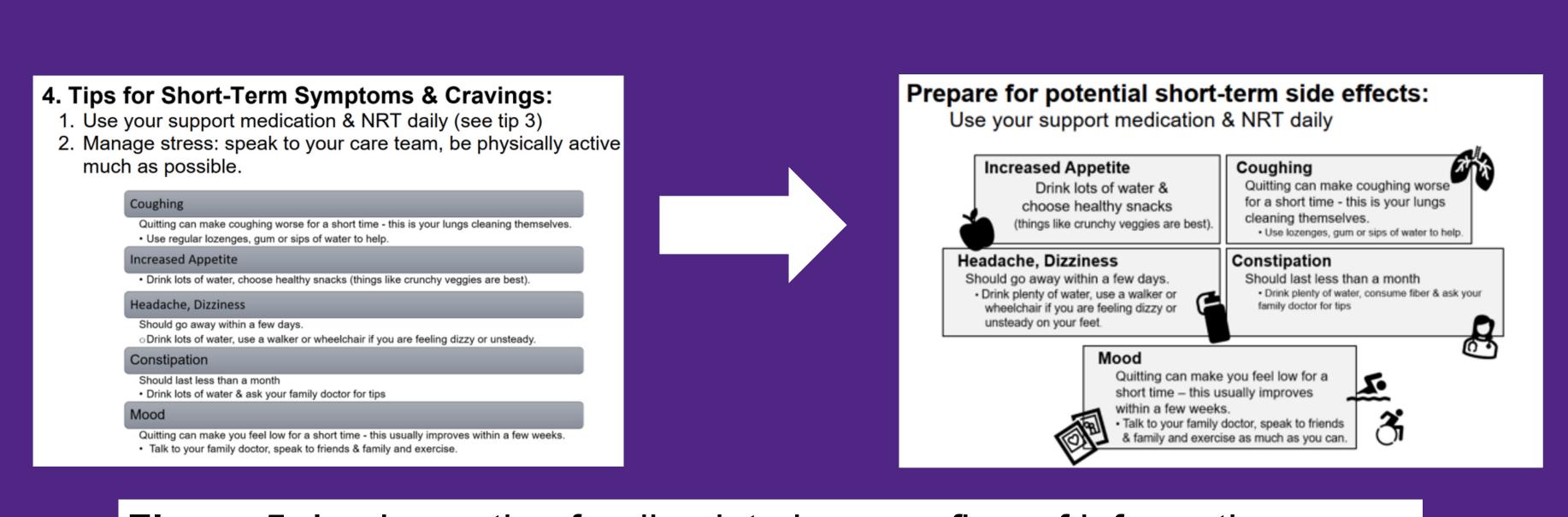


Figure 5: Implementing feedback to improve flow of information, readability and patient-centered language.

PROGRESS & RESULTS

Change Idea: patient-centered handout.

PDSA Cycle #1: Iterative feedback obtained from key stakeholders - patient educators, physicians, inpatient & outpatient nurses (centre panel)

- Generic smoking cessation resources are widespread - make the handout specific to limb loss (Figure 3 & 4).
- Content Likes:
 - All healthcare providers liked the page with brief information on pharmacologic interventions.
 - All stakeholders liked the financing options textbox (Figure 6).
- Patient-centered language:
 - Avoid judgemental words "should"
 - Lay terms only (avoid Ottawa Model, NRT)

Future Plan: obtain & implement feedback from patients from inpatient & outpatient non-traumatic amputee care.



Figure 6: Financing opportunities for nicotine replacement (NRT) and other pharmacologic agents.

IMPLEMENTATION & SUSTAINABILITY

PDSA Cycle #2: Handing out the handout (future work)

- Outpatient: distribute on Amputee Clinic days.
 - Process measure: # distributed at end of day.
- Inpatient: add to admission & discharge packages.
 - Process measure: # distributed per quarter.
- Balancing Measures:
 - Healthcare provider reports of increased workload & feeling of futility.

Sustainability is a future goal - aim will be to embed the handout in usual practice; further PDSA Cycles & feedback from interdisciplinary clinicians & patients will be essential for success.