Creating an insulin teaching toolkit for initiation of insulin therapy upon hospital discharge

Krystin Boyce, BSc, BSc (Pharm), ACPR, Sarah Weinkam, RN, MHS, CCN(C), Reena Khurana, MD, FRCPC
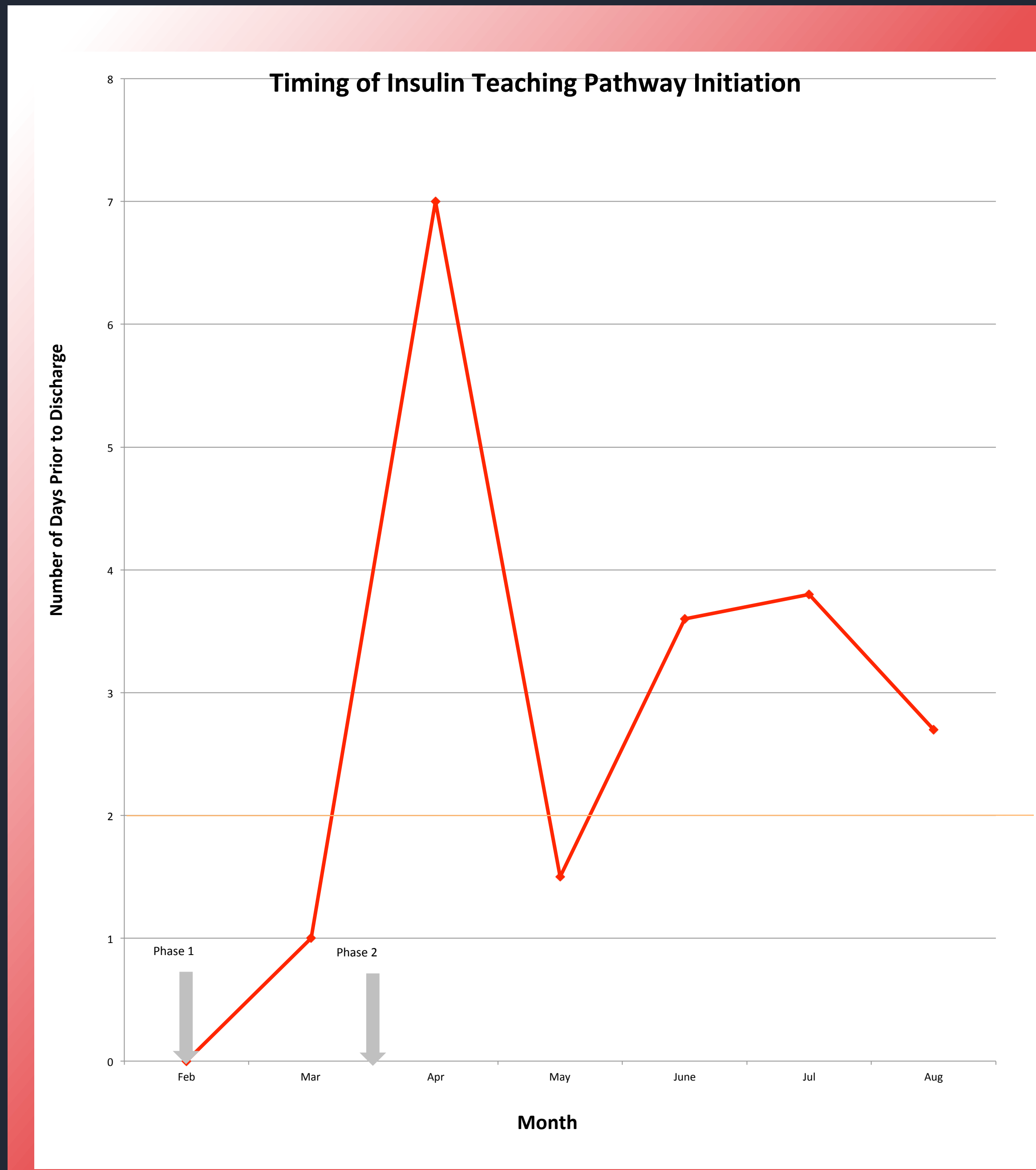
BACKGROUND

- Diabetes is associated with significant morbidity, hospitalization and premature mortality

- Insulin listed in top 5 meds associated with Emergency Dept visits

- Lack of advanced discharge planning: Pts newly started on insulin often receive last minute teaching prior to hospital discharge

- Ineffective, overwhelming for patients, delays discharge, stressful for staff

- Risk of serious medication-related errors and readmission

CONTENT

- Developed a comprehensive approach to educate patients to measure blood glucose, inject insulin and recognize/treat hypoglycemia

- Teaching Kit: booklets, DVDs and discussion, equipment for monitoring glucose and administering insulin, surveys to assess impact & experience of care

- "Insulin Teaching Pathway"- standardized checklist placed in MAR documenting teaching and skill practice

- Patient & staff surveys

- Nursing staff inservices

- Physician/Pharmacist/Dietician engagement sessions

- Retrospective chart review

AIM

To develop a standardized insulin teaching toolkit and initiate early education and practice of knowledge/ skills during admission, for patients to be newly discharged on insulin.

- Earlier discharges
- Prevent Readmissions
- Improve patient outcomes & safety
- Improve staff education & comfort

PHASE 1

- N = 5 patients (Internal Medicine units)

- Teaching done day of discharge/day prior to discharge

- 1/3 nursing staff rated comfort for providing teaching was "poor/fair/good"

- 1 patient readmitted in 30 days due to diabetes related complication.

PHASE 2: GOALS

- Earlier implementation: 75% patients start teaching 2 (+) days prior to discharge

- Improved documentation: 100% of patients given toolkit recorded by unit

- Improved staff comfort: 85% surveyed report overall confidence "very good or excellent"

- Improve patient confidence: 90% report "very good or excellent"

- Expand to general medicine units

CHALLENGES

- Incomplete documentation

- Staff engagement & patient selection

- Workload constraints & resources

NEXT STEPS

- Repeat staff surveys to assess improvement in comfort levels and workload

- Project Expansion through Physican Quality Improvement (PQI) Group

- Implementation on focused medicine units to streamline process and staff training

- Refine patient satisfaction surveys to assess patient-centered outcomes

RESULTS

Timing of Insulin Teaching Pathway Initiation

Number of Days Prior to Discharge — Month
Phase 1 — Phase 2

- **N=15 Patients**

- **Mean time to teaching pathway initiation = 3.4 days prior to discharge**

- 9/15 started education 3+ days prior to discharge

- 15/15 given appropriate discharge Rx (including diabetic supplies)

- 14/15 referred for follow up at Diabetes Health Clinic

- 1/15 readmitted in 30 days (unrelated to Diabetes)