# A Pattern Management Curriculum for the Diabetes Care and Education Specialist

Joslin Diabetes Center

HARVARD MEDICAL SCHOOL AFFILIATE

**Erin Kelly, M.Ed., RN, BSN, CDCES**

**Joslin Diabetes Center, Boston, MA**

## BACKGROUND

- Diabetes educators are often placed in the role of providing generalized diabetes education with little preparation on how to approach, read, interpret, and digest glycemic data and patterns.

- All CDCES' need skills to review glucose data in order to assist patient in achieving goals and glycemic targets. Diabetes management based on glycemic patterns is associated with improved patient outcomes; and achieving euglycemia reduces risks of complications.

## AIM

- Create a system to learn pattern management and progressively advance complexity levels.

- Improve educator confidence in pattern complexity by two levels in six months, and ≥ level 5+ in one year.

## METHODS

- New Educator Staff Initial Track
  - 1:1 in Pattern management mentoring
- Recurring Pattern Management Forum
  - Bi-weekly mentor guided discussions
- Subjective self-assessment survey

## METHODS

**New Educator Staff Initial Track**

*Four preparatory strategy sessions on approaching data and pattern management*

1.) How To's of Downloading and Reports
2.) Unique Features of DM Devices
3.) Pattern Management Concept Overview
4.) Pattern Management  - CGM Overview

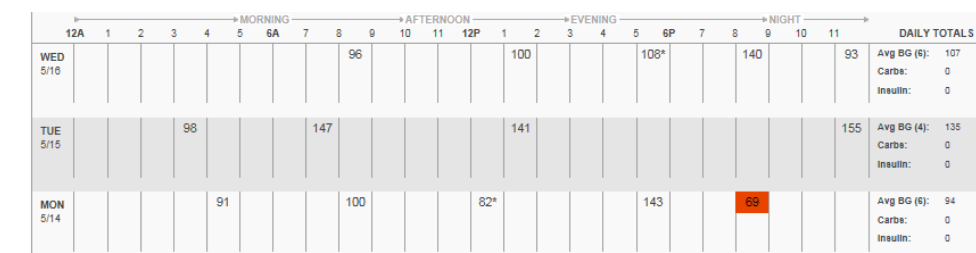*Eight case type sessions progressing in pattern complexity*

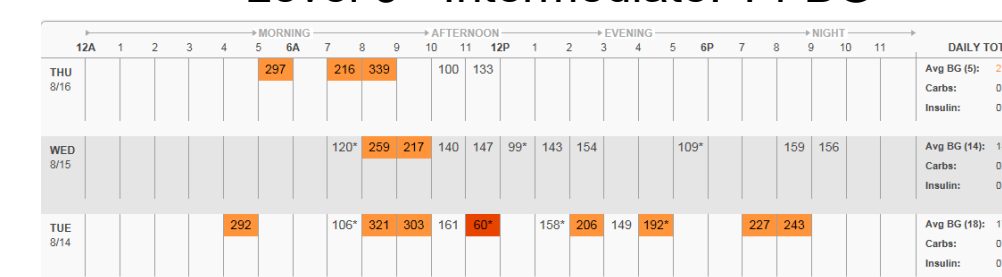| Pattern Complexity Level | Case Type | Competency Level |
|---|---|---|
| Level 1 | T2 BG | Novice |
| Level 2 | T2 CGM | Novice |
| Level 3 | T1 BG | Intermediate |
| Level 4 | T1 CGM | Intermediate |
| Level 5 | T1 Pump | Advanced |
| Level 6 | T1 Pump/CGM | Advanced |
| Level 7 | Algorithm Pumps | Expert |
| Level 8 | DIY Looping | Expert |

**Recurring Pattern Management Forum**
- Virtual, drop in, lunch time, bi-weekly pattern management forum
- Education and NP staff
- Topics submitted by staff or offered by mentors based on departmental feedback and needs:
  Hypo/Hyperglycemia, pump failure, pregnancy, algorithms, DKA, cognitive impairment, pump readiness, etc...
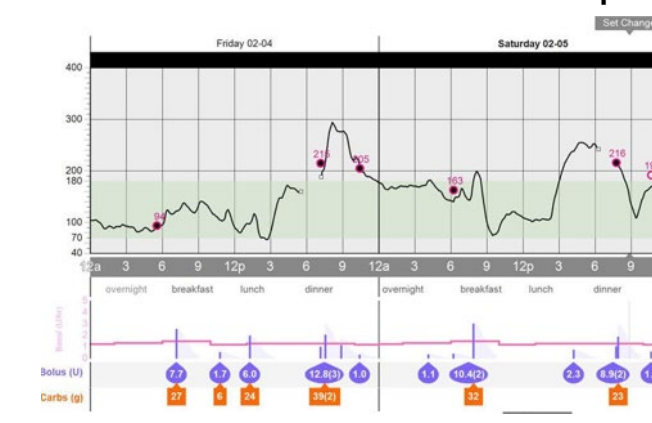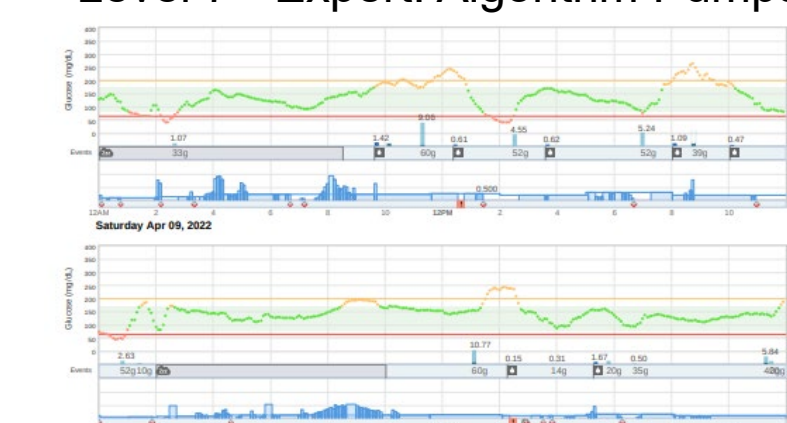
## Case Type Complexities
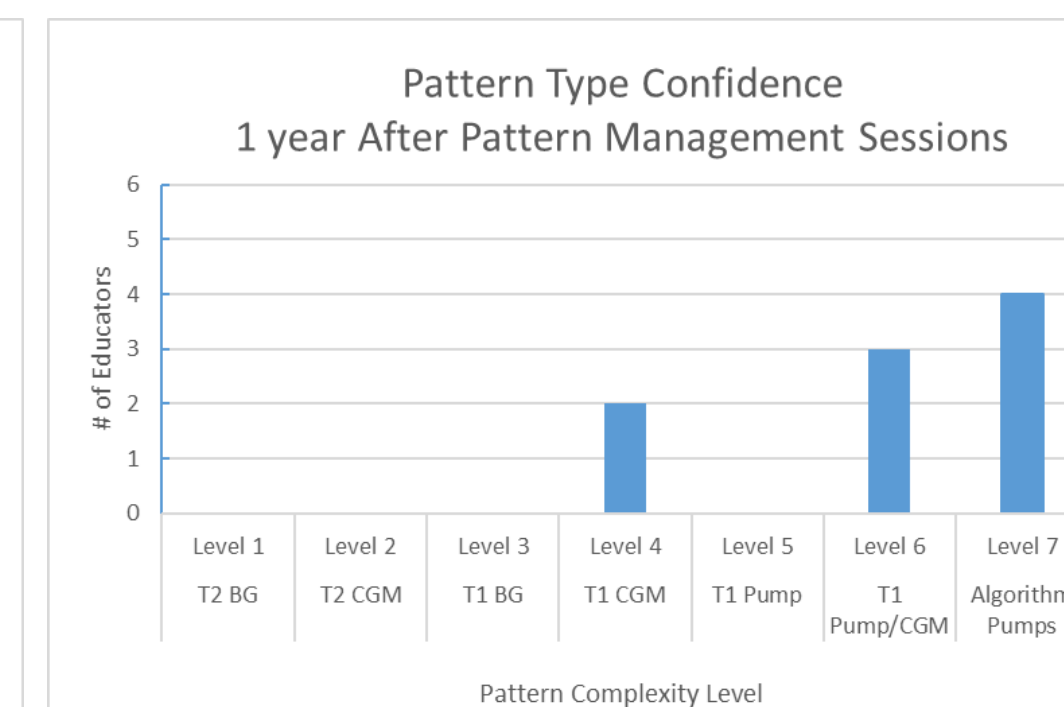
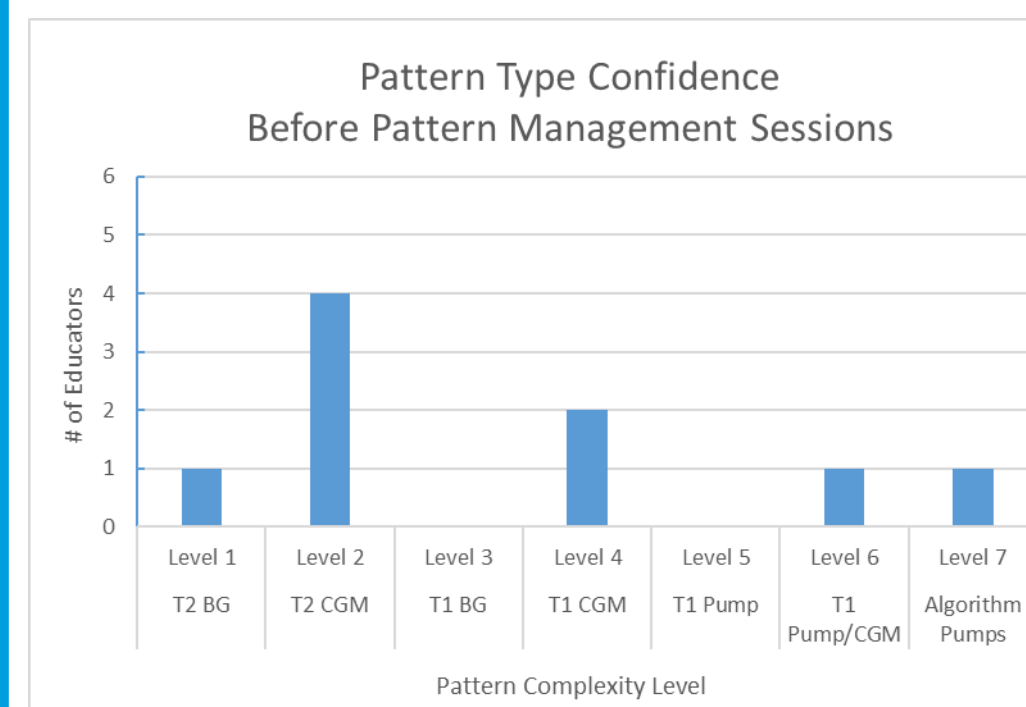Level 1 - Novice: T2 BG

Level 3 - Intermediate: T1 BG

Level 6 – Advanced: T1 Pump + CGM

Level 7 - Expert: Algorithm Pumps



## RESULTS

Pattern Type Confidence
Before Pattern Management Sessions

Pattern Type Confidence
1 year After Pattern Management Sessions



## RESULTS

- Educator confidence in pattern complexity improved 2+ levels across the board.

- Educator confidence in pattern complexity levels ≥ 6+ improved from 22% to 78% in one year.

- Educators found the pattern management curriculum and forum most useful for pattern discussion and strategy planning with peers & practice of pattern analysis.

## SUMMARY & IMPLICATIONS

**New Educator Staff Initial Track**
- All educators need pattern management skills to support patients in achieving goals and glycemic targets.
- Development of competency evaluation would better gauge educator skills and gaps for further development.

**Recurring Pattern Management Forum**
- Forum is an excellent space to practice pattern management skills and get peer feedback.
- Quarterly survey to assess confidence level & determine educator needs.
- Create a case sign up to encourage educators to lead/engage in sessions with peers.