Quality improvement practice of standard diabetes care in a general hospital : action research to provide equal care for outpatients

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Backgrounds

- Primary care physicians must treat diabetic patients based on the standardized guideline: diagnosis and classification, management of glycemic control with pharmacological, exercise, or diet therapy, comprehensive medical evaluation and assessment of comorbidities, and risk reduction interventions.
- Care quality depends on each physician in a clinic.

Objectives

- To implement a quality improvement practice for diabetes care to provide high-quality care equally for outpatients in a general hospital.

Clinical setting

- General hospital

- 318 beds: Internal med (IM), General med (GM), Surgery, Orthopedics, Anesthesiology, Urology, Dermatology, Palliative med, Radiology, Otolaryngology, Gynecology, Pediatrics, Orthodontics

- Number of physicians caring DM: Internal med 11, General med 9-11

Methods

- Target population: Diabetic outpatients (type 1 or type2 DM)

  ≥ 18 y.o.

- Eligibility: ≥ 4 visits / year in IM or GM clinic, Yearly reviewing the medical charts to evaluate 11 quality indicator items
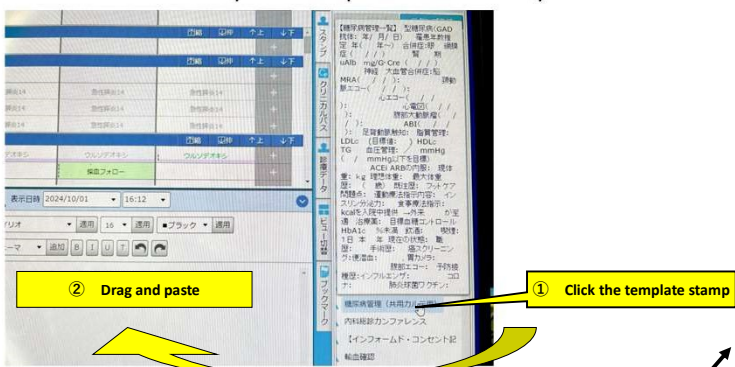
Results ① (FY 2022)

- Eligible: 129 patients (Male 75, Female 54) ➡ Analyzed all patients
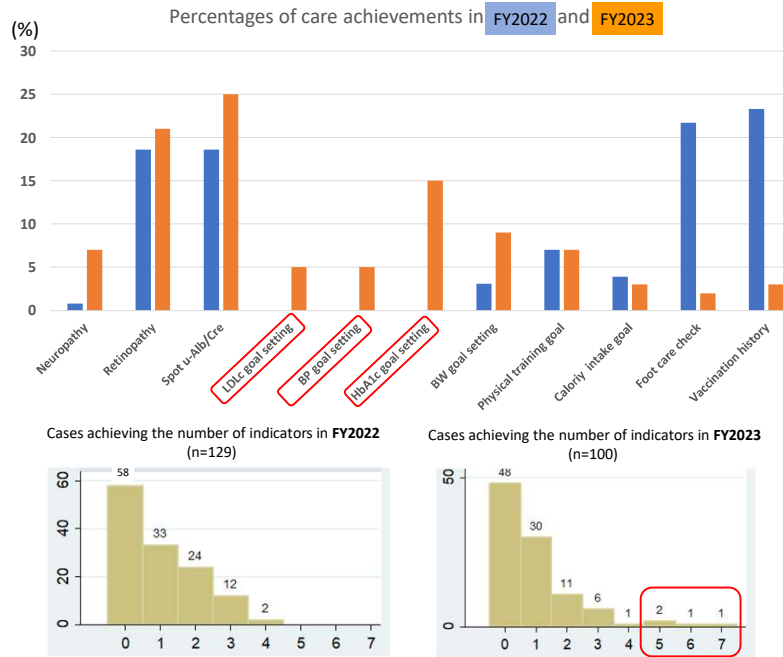- Average age (± SD): 74.7 (± 10.7) y.o.

Percentages of care achievements in FY2022
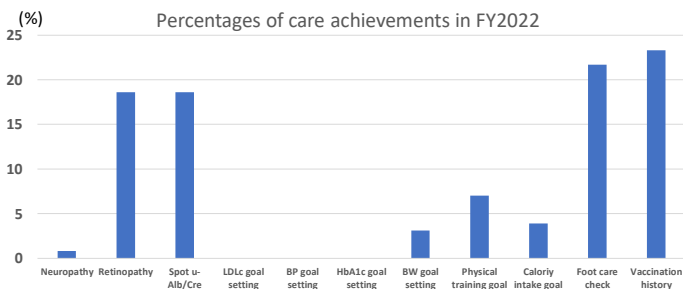
Implementation ①

⭐ "**Summary template of DM care**" for all doctors

Based on the characteristic of our hospital's system...
- Easy to paste on the electric medical chart
- Free to modify the template individually

② Drag and paste   ① Click the template stamp

Results ② (FY 2023)

- Eligible: 1007 patients ➡ Analyzed randomly selected 100 patients
- Male 59, Female 41
- Average age (± SD): 71.2 (± 11.3) y.o.

Percentages of care achievements in FY2022 and FY2023

Cases achieving the number of indicators in FY2022 (n=129)

Cases achieving the number of indicators in FY2023 (n=100)

Discussions

- The number of eligible DM patients in FY2022 was corrected to 1200 due to the mistake of data retrieval! (❌)
  - DM patients without a history of hospitalization by any cause were retrieved in the first analysis...
- We found the evidence of physicians using the DM care template in the medical chart during data collection, resulting in patients achieving a higher number of indicators.
- The template facilitated the individualized goal settings (LDLc, blood pressure, HbA1c, body weight) by the outpatient clinics in our hospital.

Conclusions

- The implementation facilitated health equity in a hospital.
- The implementation is for an equity-oriented approach to promote health for all patients, including vulnerable groups.
- As a next step, we plan to collaborate with a clinic nurse to distribute a "Task card" to a patient to fill in the status of the indicators.

References

American Diabetes Association Professional Practice Committee; 4. Comprehensive Medical Evaluation and Assessment of Comorbidities: Standards of Care in Diabetes—2024. Diabetes Care 1 January 2024; 47 (Supplement_1): S52–S76. https://doi.org/10.2337/dc24-S004