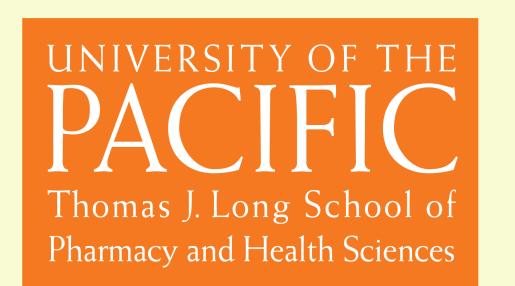# Health Report Card: Evaluating health outcomes through student-driven comprehensive service-based health fairs targeting Medicare beneficiaries

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BACKGROUND

- The presence of chronic conditions (e.g., hypertension [HTN], hyperlipidemia, and type 2 diabetes mellitus [T2DM]) can have a major impact on patient outcomes.
  - In 2017, the American College of Cardiology and American Heart Association (ACC/AHA) issued stricter blood pressure targets, resulting in an increased prevalence of HTN from 32% to 46%.[1]
    - In 2015, <50% of adults diagnosed with HTN were considered controlled.[2]
  - It was reported that 36.7% of U.S. adults (≥21 years of age) were eligible for cholesterol-lowering therapy based on the 2013 ACC/AHA Guidelines.[3]
    - Only 55.5% of those eligible were on pharmacologic therapy.[3]
  - In 2015, the prevalence of T2DM in those ≥65 years of age was ~25%.[4]
    - Additionally, 48.5% of those ≥65 years old had prediabetes, however, only 11.6% reported being diagnosed.[4]
- Student pharmacist-driven health fairs can provide health screenings/services, patient education for common chronic conditions, and a platform for prescriber follow-up.[5]
- Medication Therapy Management (MTM) services may:
  - Increase the number of patients who achieve their "goals of therapy",[6]
  - Identify potential medication-related problems (MRPs),[7] and
  - Assess medication adherence.[5]
- Student pharmacist participation at health fairs can:
  - Fulfill Introductory Pharmacy Practice Experience and Interprofessional Experience requirements set by the Accreditation Council for Pharmacy Education,[8] and
  - Satisfy pharmacy curriculum outcomes developed by the Center for the Advancement of Pharmacy Education.[9]

OBJECTIVES

- To create a patient-centric model for a comprehensive service-based health fair that optimizes patient care, assesses patient outcomes, and enhances student learning.
- To evaluate chronic condition control, identify medication-related problems, and provide relevant recommendations to prescribers.

METHODS

- In total, 14 health fairs targeting Medicare beneficiaries were held in 10 cities throughout Northern/Central California during the fall of 2017.
- At each health fair, 13 individual health screenings/services were available for attendees.
  - When applicable, chronic condition control was assessed by comparing a patient's clinical values against corresponding practice guidelines.
- Medicare Part D & MTM services.
  - Medicare Part D interventions included evaluation of potential out-of-pocket cost savings opportunities through plan optimization.
  - The provision of MTM services typically utilized an interdisciplinary approach in which pharmacy students worked with nurse practitioner and/or physician assistant students.
  - A systematic process was utilized to guide each MTM intervention.
    - MRPs were identified and reviewed with the patient.
    - Severe MRPs, as determined in consultation with the pharmacist preceptor, were communicated to the patient's prescriber(s).
- All screenings/services were conducted by trained student pharmacists under the direct supervision of licensed pharmacists.
- Student pharmacists' confidence was assessed using a 10-point Likert scale (1 = strongly disagree, 10 = strongly agree) both before didactic education and after experiential practice (health fairs).
- Parameters evaluated included:
  - Explaining the Medicare Part D benefit,
  - Performing MTM-related services, and
  - Top 200 drug-related knowledge.
- Statistical Analyses.
  - Descriptive statistics were performed to:
    - Summarize patient uptake at each screening/service station,
    - Assess patients' achievement of disease/condition control, and
    - Summarize the change in student confidence.
  - All statistics were performed via IBM SPSS Statistics for Windows, Version 25.0 (Armonk, NY).
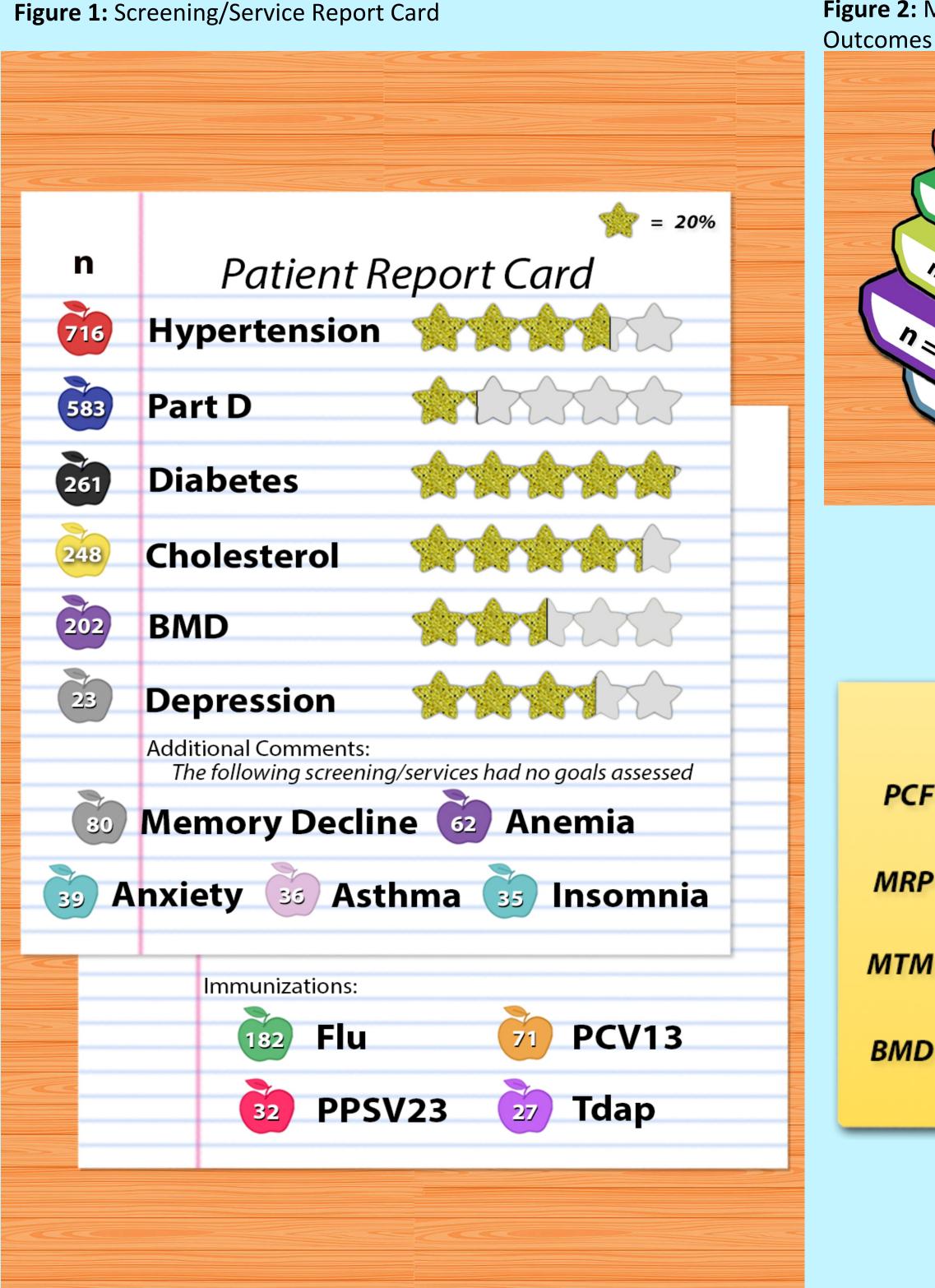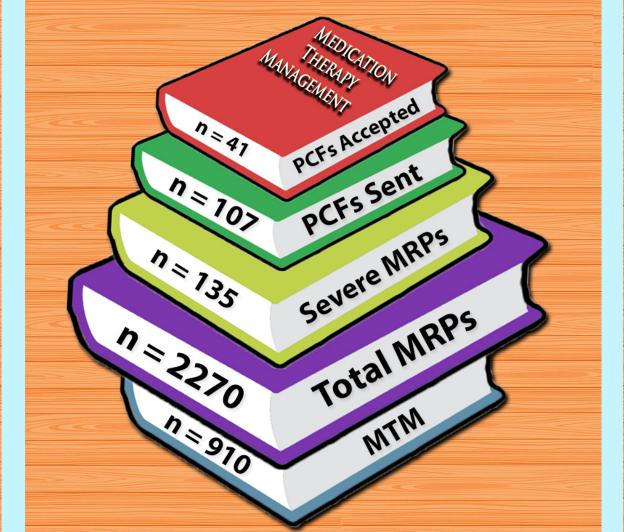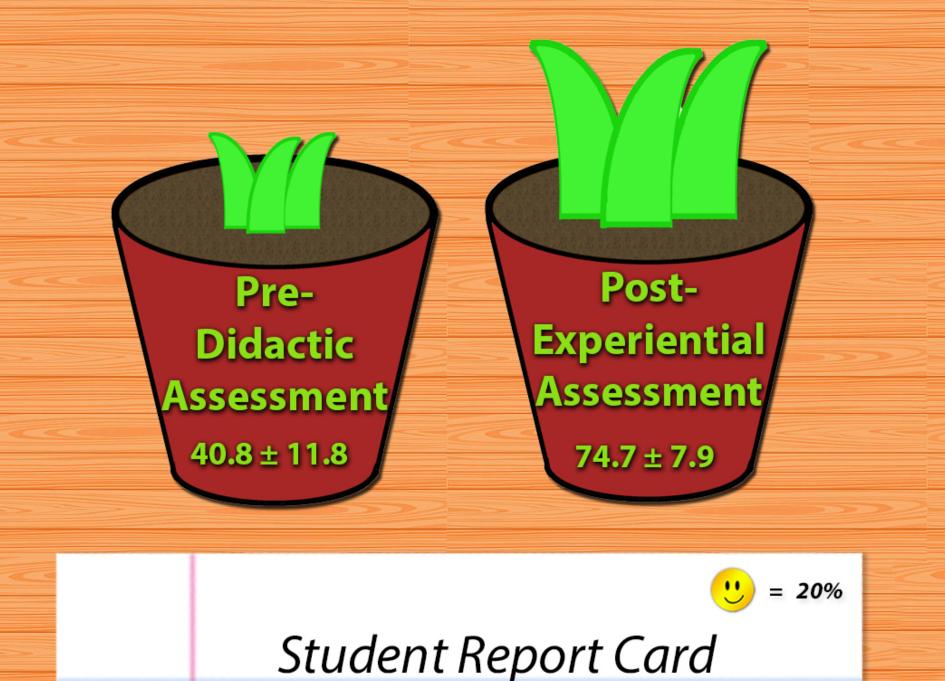
RESULTS

Figure 1: Screening/Service Report Card

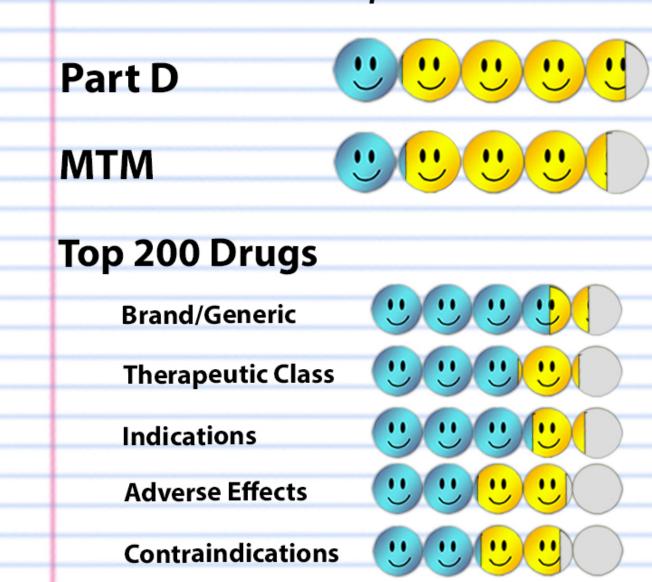Figure 2: Medication Therapy Management Outcomes

Figure 3: Student Report Card

Key

PCF = Prescriber Communication Form

MRP = Medication-Related Problem

MTM = Medication Therapy Management

BMD = Bone Mineral Density

RESULTS

- Provided screenings/services can be found within the "Patient Report Card" (Figure 1).
  - A total of 1928 screenings/services were provided to the 910 patients who received MTM services.
  - The # inside each apple corresponds to the uptake of that screening/service.
  - The shading of stars next to each screening/service represents the % of patients at "goal" for that screening.
- The "Student Report Card" displays parameters on which student confidence was assessed (Figure 3).
  - The relative shading of the "happy faces" represents the average confidence on that parameter before didactics (blue) and after experiential practice (yellow).
- Change in student confidence is represented by the "growth" in the two plants (Figure 3).

DISCUSSION/CONCLUSION

- Student pharmacist-driven comprehensive service-based health fairs have the potential to benefit patients and students alike.
  - Patient benefits include:
    - Receiving necessary health screenings and education,
    - Receiving indicated vaccines,
    - Assessing their current health and disease control, and
    - Increasing their level of confidence in managing their own health.
  - Student benefits include:
    - Improving their patient communication skills,
    - Improving interprofessional communication skills by alerting providers of identified MRPs, and
    - Improving their own confidence in knowledge and skills.
- Student pharmacist-driven patient-centric health fairs improve patient care while enhancing students' preparation for Advance Pharmacy Practice Experiences and, ultimately, the pharmacy work force.

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