ASHP BEST PRACTICES AWARD

Elevating Outcomes and Pharmacoequity: An Enterprise Comprehensive Ambulatory Care Pharmacy Program Embracing Standardization, Digitalization, and Reduction of Health Disparities

Hanlin Li, PharmD, MBA, BCACP
Amber Bradley, PharmD, BCACP
Jim Thurston, PharmD, BCACP
Nadine Dandan, PharmD, BCACP, AAHIVP
Shanice Coriolan, PharmD, BCPS, BCACP, BC-ADM
Yuliya Baratt, PharmD, BCPS
Dodi Zenilman PharmD, BCACP
Celina Chow, PharmD, AAHIVP
Cindy Ippoliti, PharmD

NewYork-Presbyterian Hospital
New York, NY

WITH WORLD-CLASS DOCTORS FROM
COLUMBIA · Weill Cornell Medicine · NewYork-Presbyterian

Introduction

New-York Presbyterian Hospital (NYP)
- Founded in 1771
- Top-ranked, comprehensive, academic healthcare system affiliated with Columbia University Vagelos College of Physicians and Surgeons, and Weill Cornell Medicine
- Globally recognized for innovation, quality, and equitable care delivery
- 11 hospitals and over 450 outpatient locations across the New York metropolitan area

Pharmacy Department Vision & Mission
- To be the leading health-system pharmacy enterprise in the nation
- To provide safe, effective, comprehensive pharmacy services at the highest quality to all patients

Ambulatory Care Pharmacy
- Expanded from 2 FTEs in 2018 to:
  - 11 ambulatory care clinical specialists
  - 3 ambulatory care faculty positions
  - 2 ambulatory care pharmacy technicians
  - 1 population health clinical pharmacist
  - 1 PGY-2 ambulatory care pharmacy resident
- Aligned to the organization's key drivers and departmental values to:
  1. Develop and expand comprehensive pharmacy services across clinics and drive outcomes
  2. Create a culture of teamwork
  3. Implement financial strategies to promote pharmacoequity
  4. Incorporate innovative technology and strategies
  5. Support professional development

Background
- Pharmacoequity is increasingly recognized as a cornerstone of healthcare delivery[1]
- Ambulatory pharmacy services have demonstrated significant benefits in disease management[2,3]

Purpose
To standardize ambulatory clinical services, enhance access through digitalization, and promote care for all

Description of the Program

Disease State Management
- First CDTM agreement (2018): diabetes management
- Agreements were purposely crafted to be applicable across all sites to ensure standardization and scalability
  - Examples of CDTMs (17 total): hypertension (HTN), CKD, COPD, asthma, HIV pre-exposure prophylaxis, stroke, cystic fibrosis, oncology, heart failure, postpartum hypertension, and obesity
- Standardized ambulatory care pharmacist processes, including referral, scheduling, and documentation

Remote Patient Monitoring (RPM)
- Implementation of 2 programs: general HTN (2021) and postpartum HTN (2023)*
  - *emphasis on timely medication adjustment, early intervention, breastfeeding support, postpartum care
- Program utilized innovative technologies
- Standardization of workflow: note templates, escalation pathways, competency checklists

Population Health Initiatives
- Dedicated pharmacist role with the use of a layered learning model to target 3 areas
- (1) Medication Adherence
  - Workflow targeting Medicare quality metric: HTN, cholesterol & diabetes
  - Access to quality payor dashboards
  - Engagement of pharmacy extenders to improve access to care
  - Escalations of adherence barriers to ensure prompt resolution
- (2) Annual Wellness Visits (AWV)
  - Identification of clinics with opportunities
  - Quality improvement program launched in 2 clinics
    - Students completed AWVs under pharmacist supervision
    - PGY-2 resident assumed a longitudinal, centralized role
- (3) Medication Therapy Management (MTM)
  - Collaboration with the specialty and retail team
 - PGY-2 resident completed annual medication reviews and targeted interventions

Capitalizing Financial Opportunities
- Implemented pharmacist billing: pharmacist visits, continuous glucose monitoring education, and RPM
- Collaborated with the specialty pharmacy team to increase capture rates and support patient access
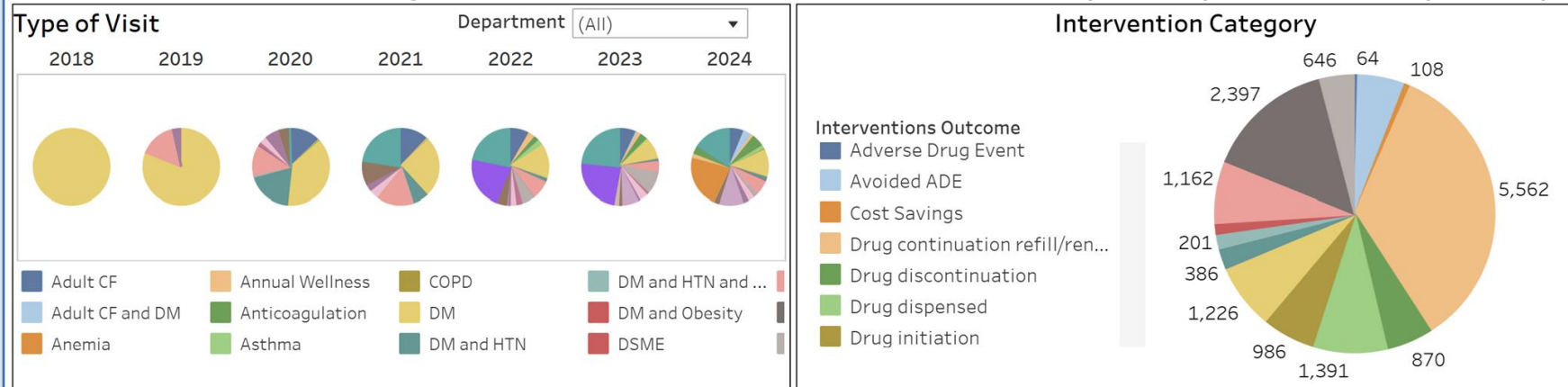- Pharmacy technicians reviewed and assisted high-cost denial claims to facilitate reimbursement

Experience with the Program

Dashboard Visualization
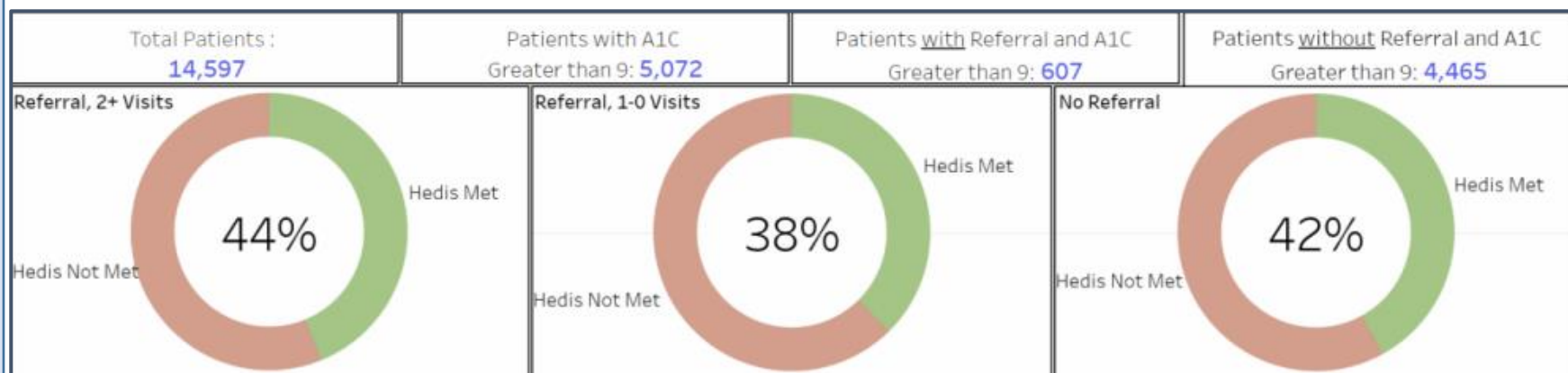- Tracked standardized metrics across all sites in real time
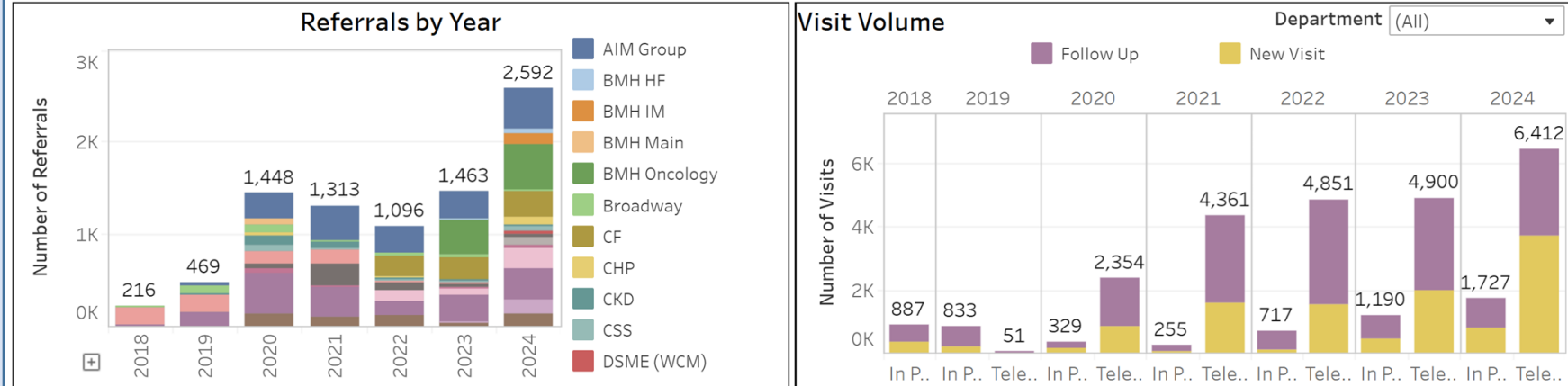
- Substantial increase in referrals: 216 (2018) to 2,592 (2024)
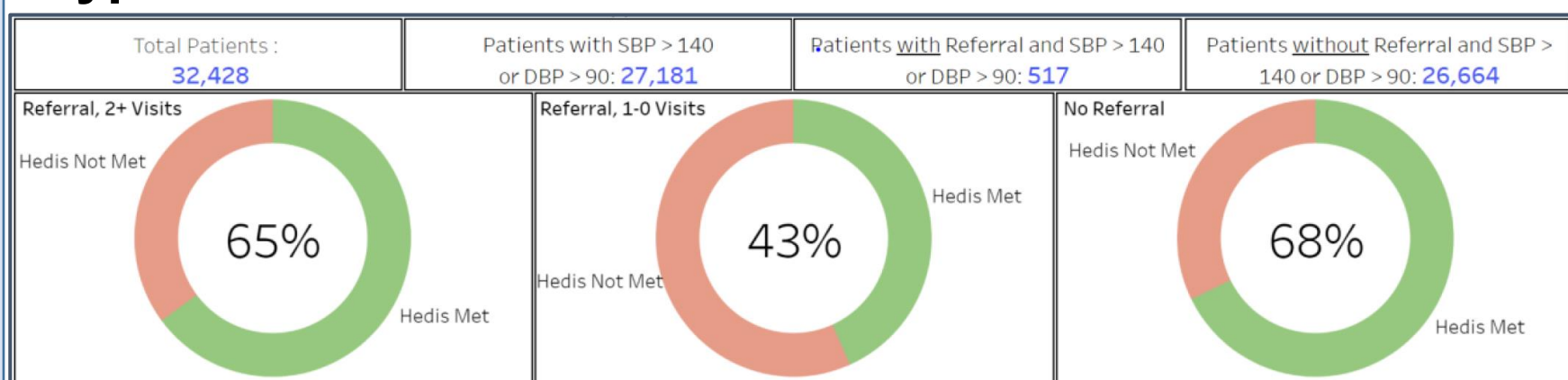- Visits surged as services expanded: 887 (2018) to 8,139 (2024)
- Diversified portfolio: solely diabetes to multiple services
- Most common interventions were refill/renewal and titration

Diabetes Outcomes

- 6% increase in goal attainment rate (A1c < 8)
- Social/economic challenges affected management

Hypertension Outcomes

- 22% increase in goal attainment rate (BP <140/90)
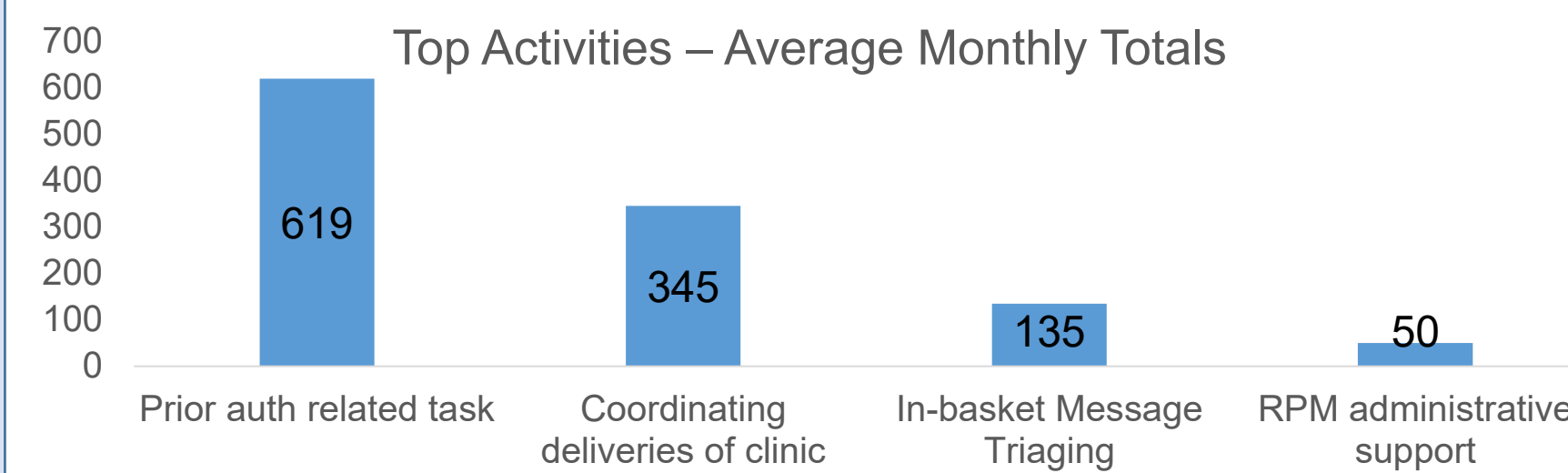- RPM played a crucial role

RPM Success

| General HTN | • Graduated 502 patients
• Average enrollment: 30 to 40/month
• Dashboard to trend impact, engagement, and eligible outreach
• PharmD group had higher baseline BP |
| --- | --- |
| Postpartum HTN | • Graduated 186 patients
• Average enrollment: 20 to 22/month
• 80% of patients engaged with the pharmacist visit
• Bridged >50 patients to primary care |

Population Health
- Medication adherence earned 4-star ratings
- Pharmacy supports up to 60% of identified AWV cases
- MTM generated $9,848 to date

Experience with the Program (Continued)

Ambulatory Care Pharmacy Technicians

Top Activities – Average Monthly Totals
- Prior auth related task: 619
- Coordinating deliveries of clinic admin meds: 345
- In-basket Message Triaging: 135
- RPM administrative support: 50

Discussion / Conclusion

Significance of Program
- Standardization and innovation: the program developed services by embedding technology and strategic workflows to expand patient access and advance pharmacoequity across diverse populations
- Technology-driven clinical integration: use of RPM, EMR-integrated workflows, and pharmacy-driven dashboards to enhance ownership and continuity of care
- Advancing outcomes and growth: pharmacist-led population health initiatives and financial strategies improved medication access

Conclusion
- Our success is attributed to standardized workflows, strategic use of technology, and robust stakeholder engagement. By integrating pharmacists into multidisciplinary teams and leveraging digital tools, the initiative has advanced pharmacoequity and demonstrated the transformative potential of ambulatory care pharmacy in addressing chronic disease and care for all patients

Acknowledgements

References

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2. Dixon DL, Johnston K, Patterson J, et al. Cost-effectiveness of pharmacist prescribing for managing hypertension in the United States. JAMA Netw Open 2023;6(11):e2341408. doi: 10.1001/jamanetworkopen.2023.41408
3. Li H, Radhakrishnan J. A pharmacist-physician collaborative care model in chronic kidney disease. J Clin Hypertens 2021;23(11):2026-2029. doi: 10.1111/jch.14372