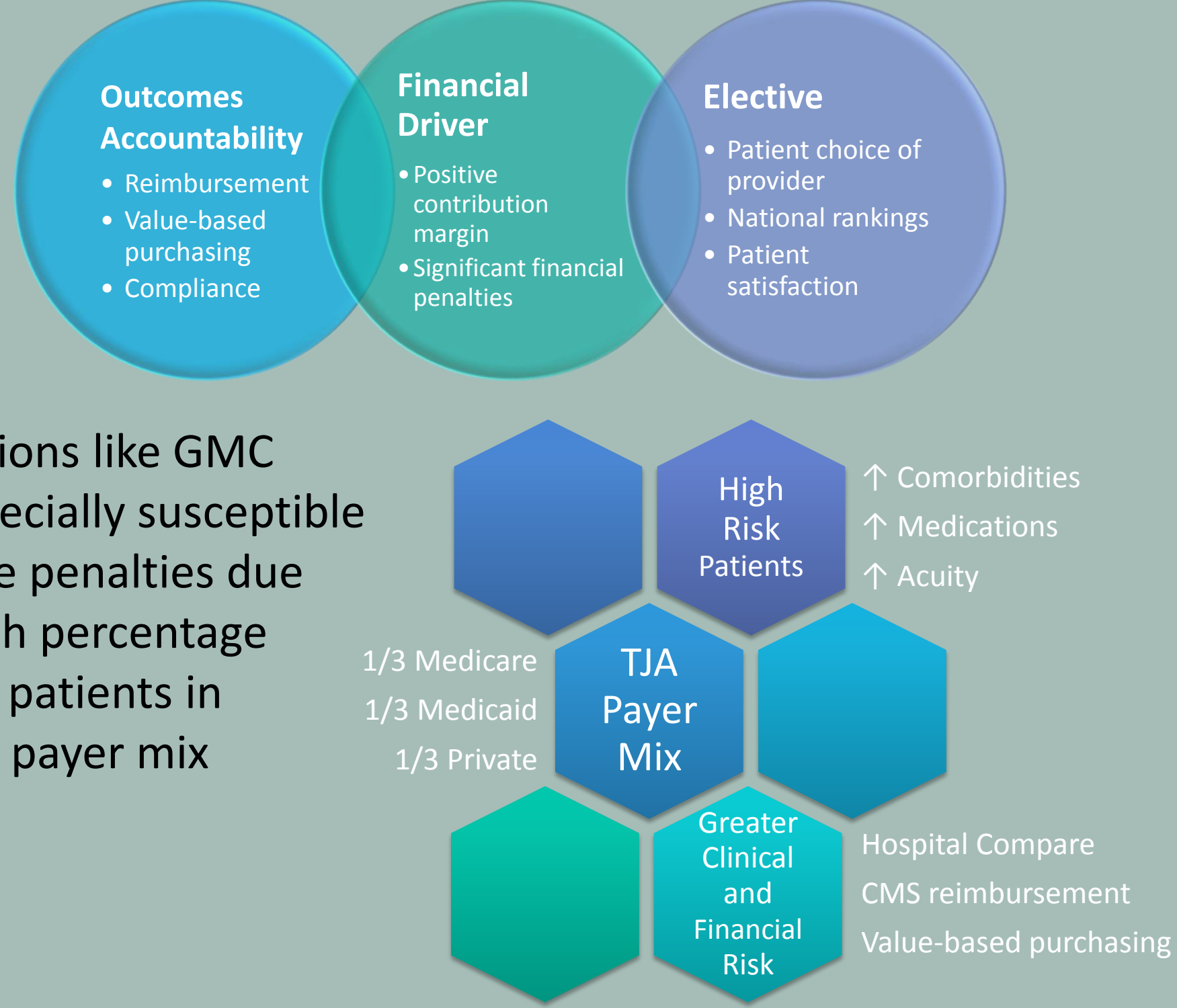


Quality and economic impact of integrating clinical pharmacists into the care of orthopedic surgery patients

| Sara Jordan, PharmD, BCPS; Brian Kramer, PharmD | Grant Medical Center (GMC)

Background

- Institutions providing total joint arthroplasty (TJA) surgery are subject to extensive regulatory monitoring and outcomes-based payment structures
- Changes to hospital reimbursement standards by the Centers for Medicare and Medicaid Services (CMS) have further underscored the vital importance of the TJA population to hospital metrics and fiscal responsibility



Institutions like GMC are especially susceptible to these penalties due to a high percentage of CMS patients in our TJA payer mix

The Pharmacy Advancement Initiative (PAI), formerly the Pharmacy Practice Model Initiative (PPMI), is a national professional movement aimed at increasing pharmacist direct patient care and accountability to medication-related outcomes

We hypothesized that the principles of the PPMI summit could be applied to this vital surgical population to develop a clinical pharmacist service that would support the interdisciplinary team in improving TJA patient outcomes

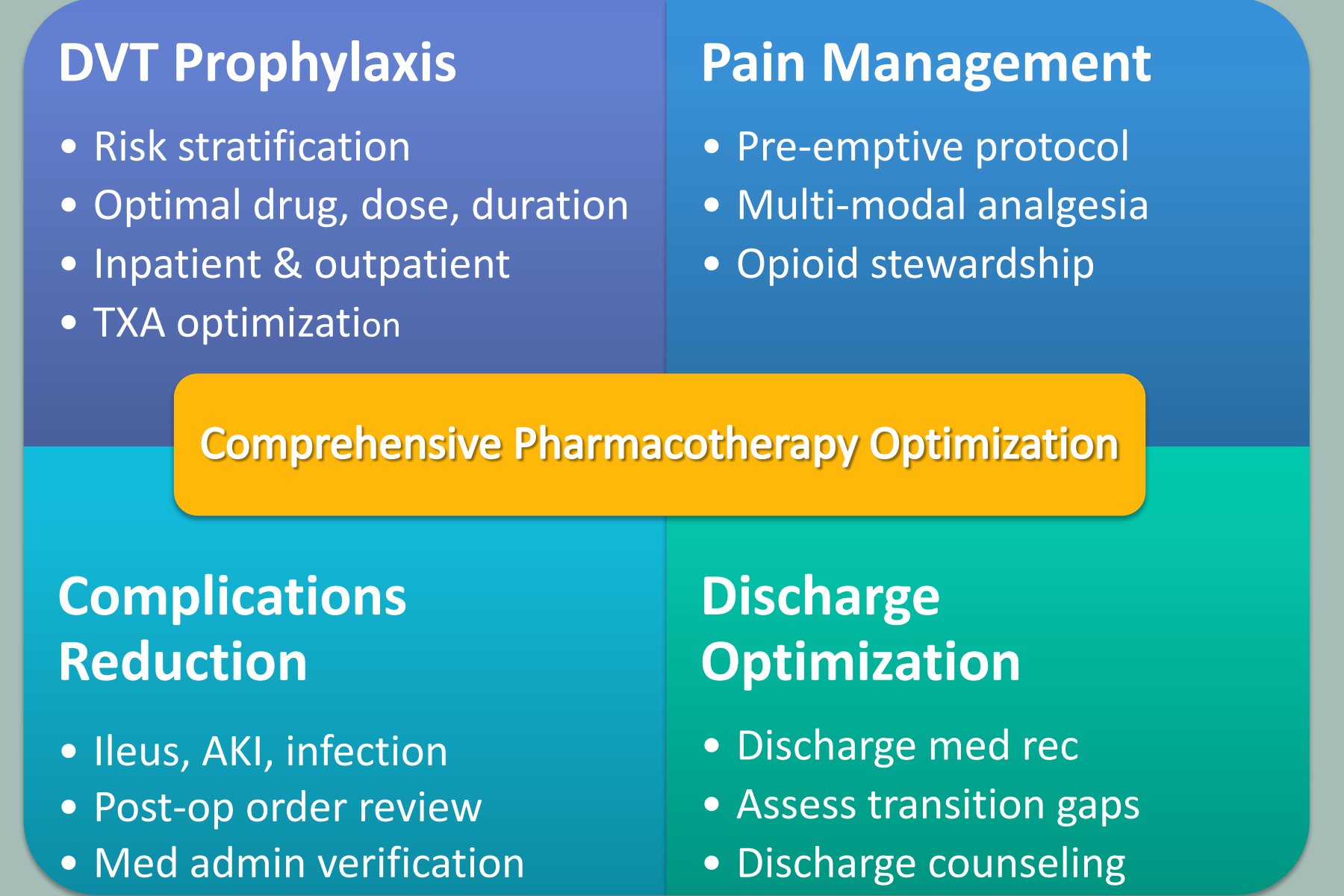


Methods

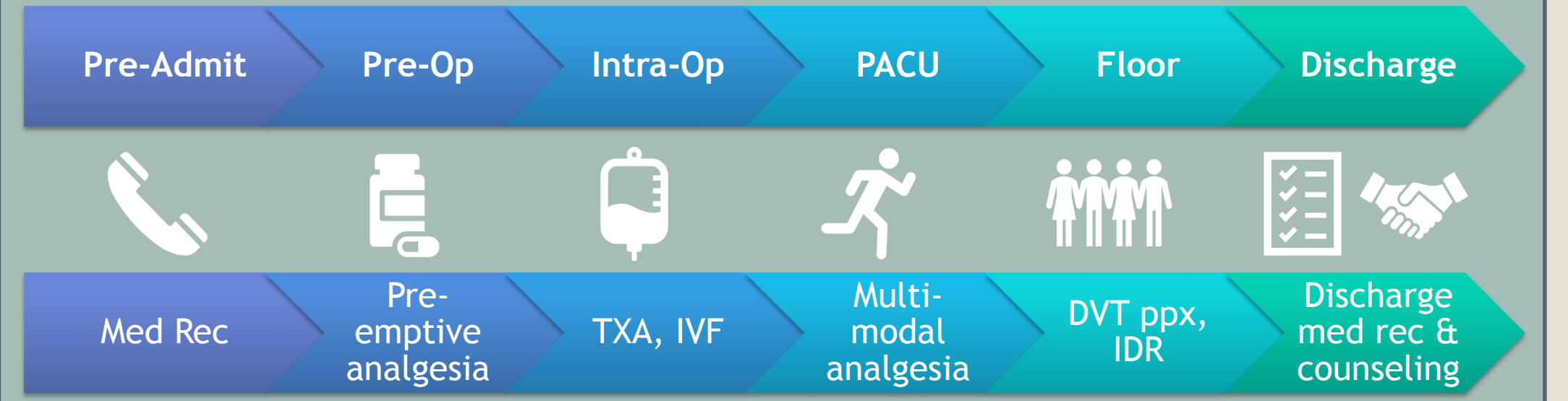
- Prospective observational study of a novel clinical pharmacist service designed to optimize medication-related patient outcomes in TJA patients
- Process for service line development:



Clinical areas of focus for ortho clinical pharmacist service:

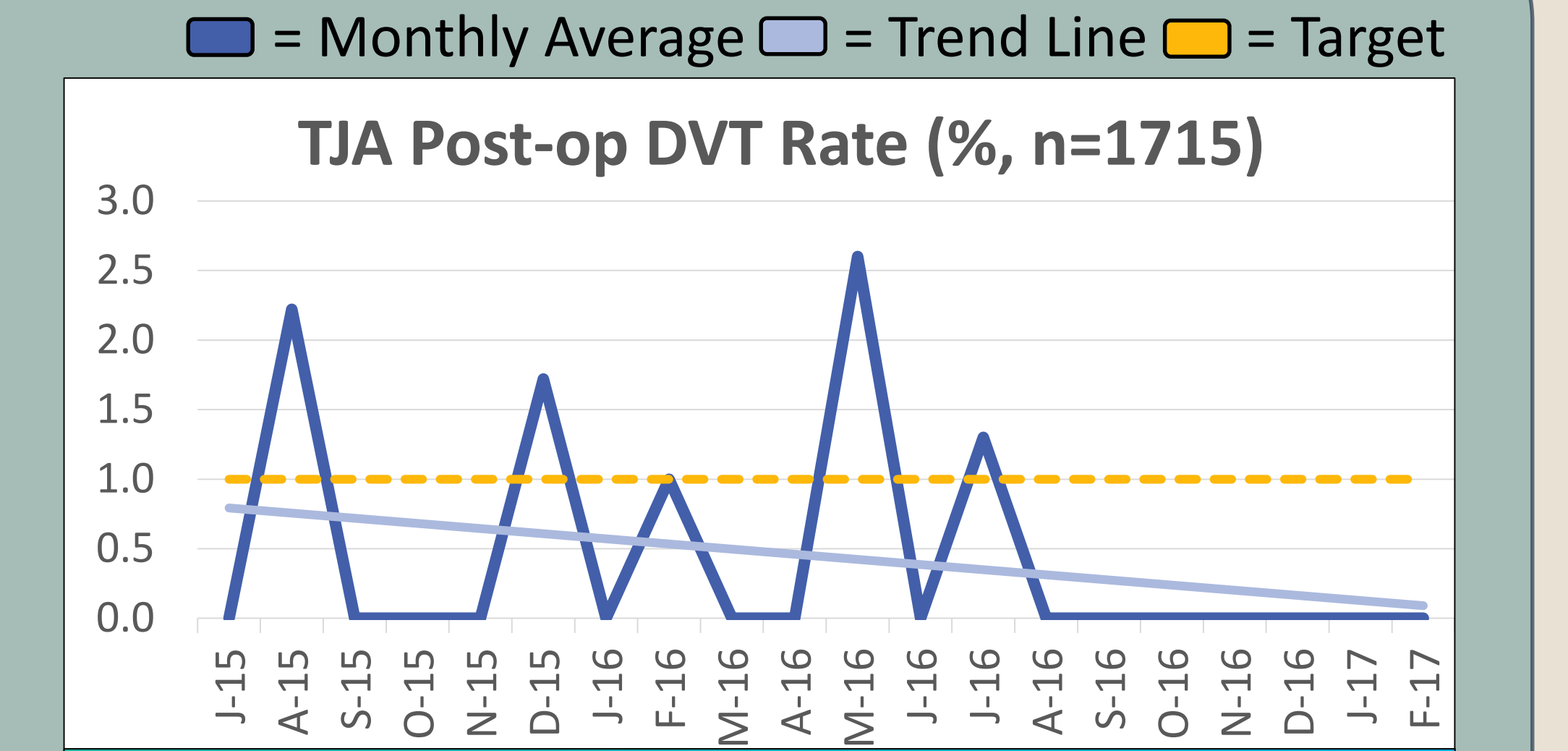


Ortho clinical pharmacy interventions pursued across continuum of care for TJA patients:

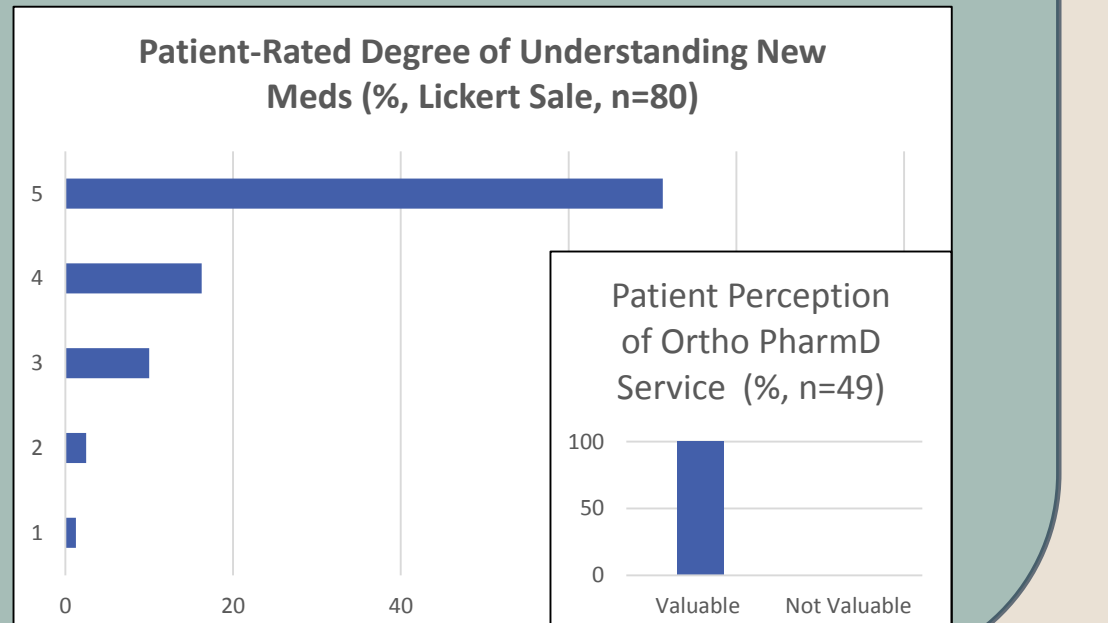
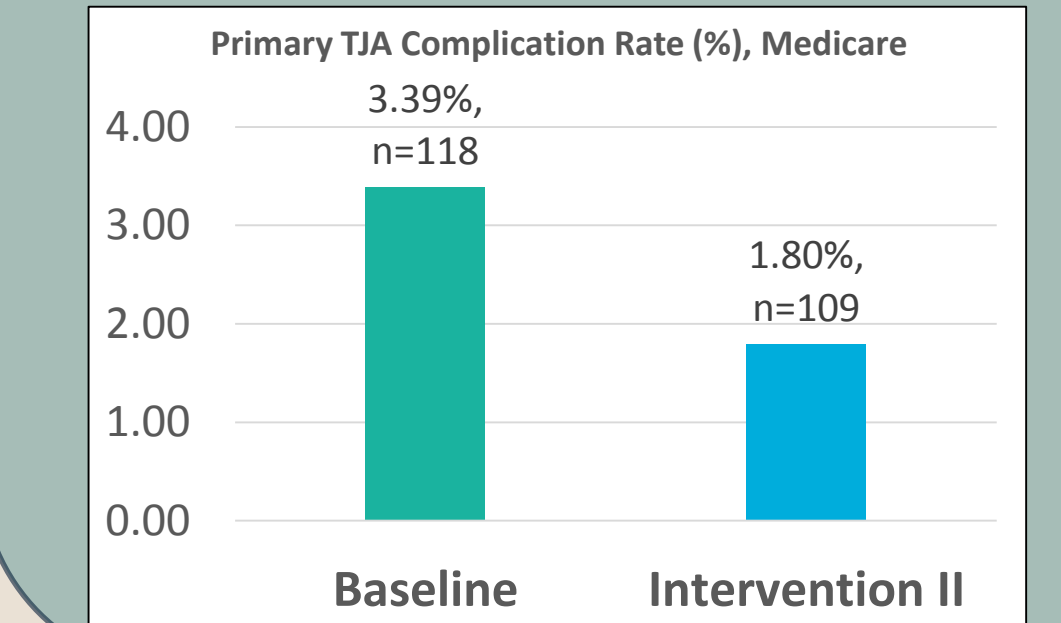
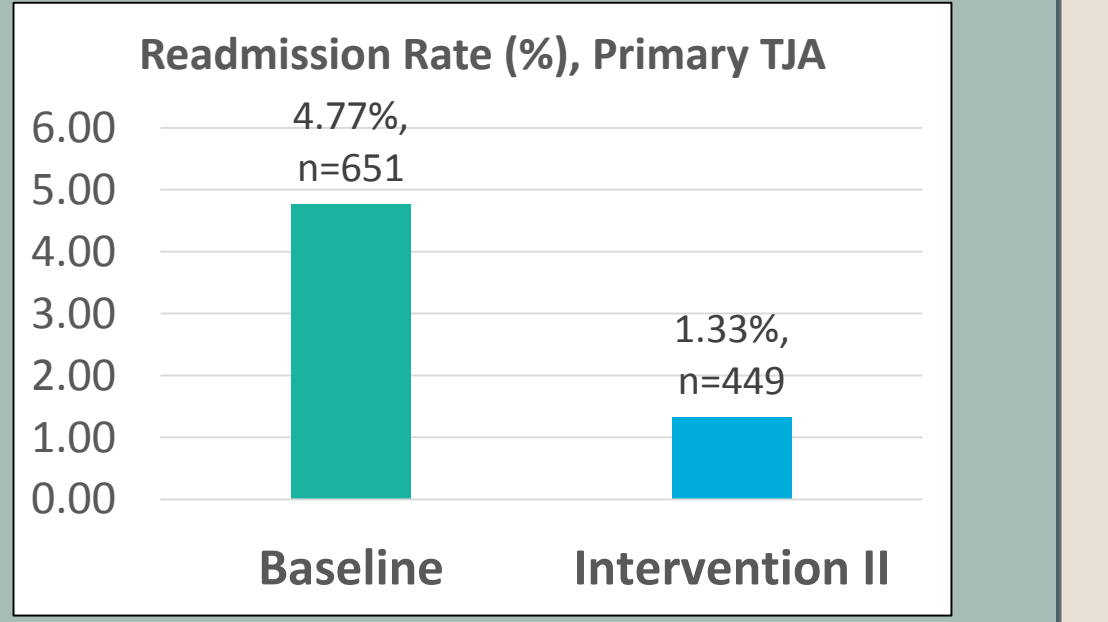
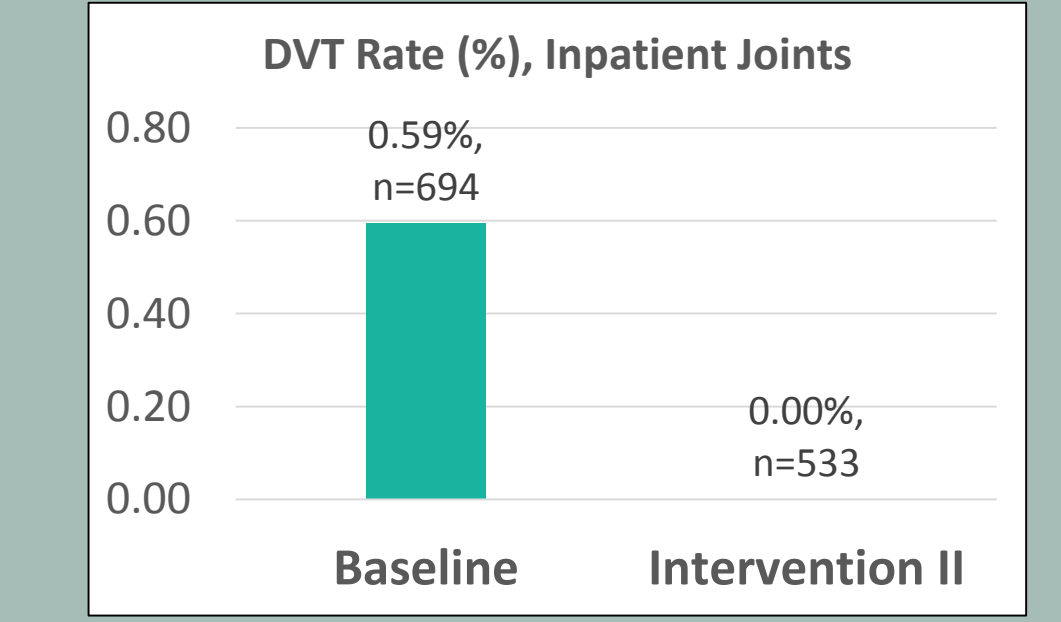
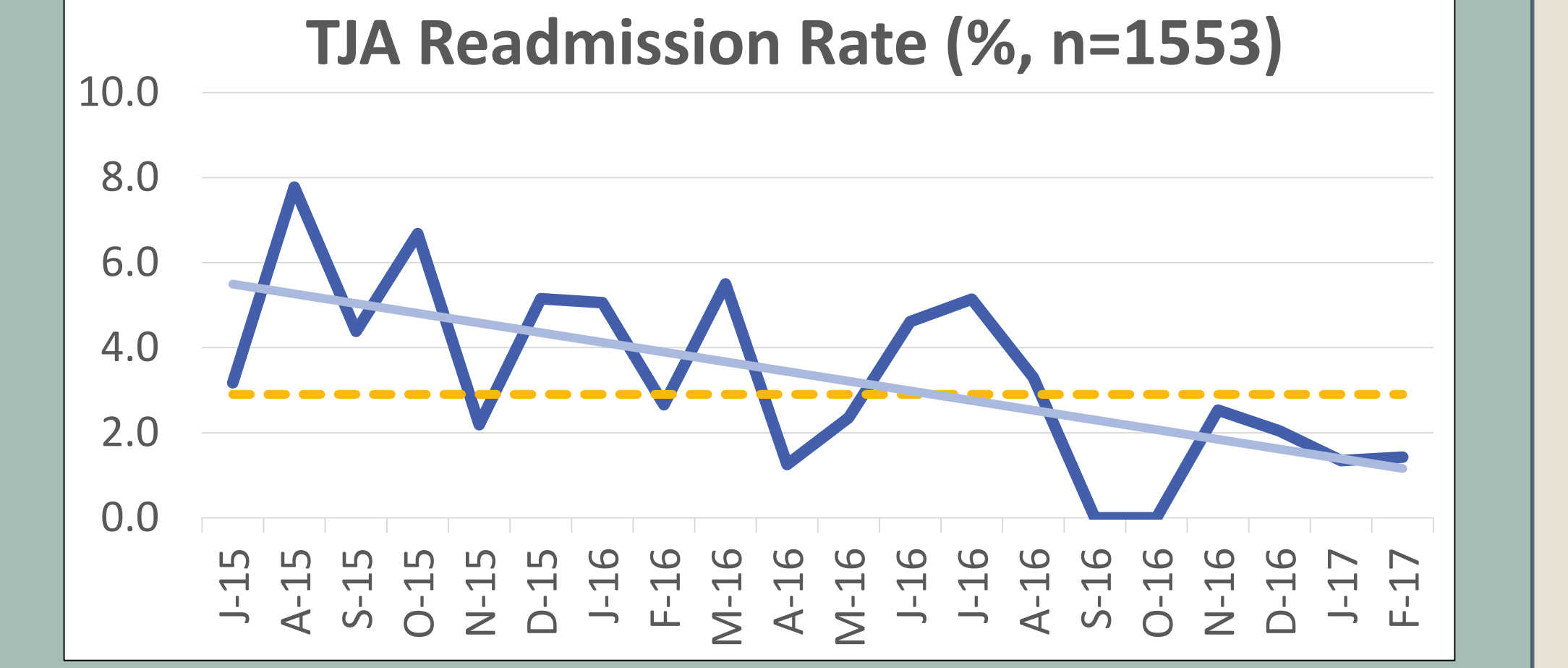


- Baseline data available for Jul 2015-Feb 2016
- Service pilot began during Feb 2016, continued as new pharmacist position for FY17
- Two subsequent 6 month intervention periods analyzed

Results



Baseline Period | Intervention Periods
Jul 2015-Feb 2016 | Mar-Aug-2016 | Sept 2016-Feb 2017



Discussion

- Interventions by a dedicated clinical pharmacy service have been associated with improvements in post-op DVT, readmission, and complication rates in a comorbid TJA population
 - Helped institution meet outcomes goals and avoid CMS reimbursement penalties
- Determination of degree of causality is limited by sequential cohort design and qualitative analyses
- A nurse-administered patient questionnaire suggested positive impact of patient education and high perceived value of service
- Interdisciplinary collaborators have also demonstrated high satisfaction and support for pharmacy involvement in TJA patient care and process improvement



Conclusion

- The orthopedic clinical pharmacy team at GMC has developed an innovative service line that is:
 - Aligned with internal and external strategic priorities
 - Adapted to delivering care in a new reimbursement landscape
 - Positively impacting outcomes in a vital patient population
 - Valued by the interdisciplinary team and TJA patients
 - Poised to conduct further research and add to professional literature
- We hope to continue our clinical and scholarly efforts, and to contribute to outcomes-based pharmacy practice model expansion at OhioHealth and beyond

References

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