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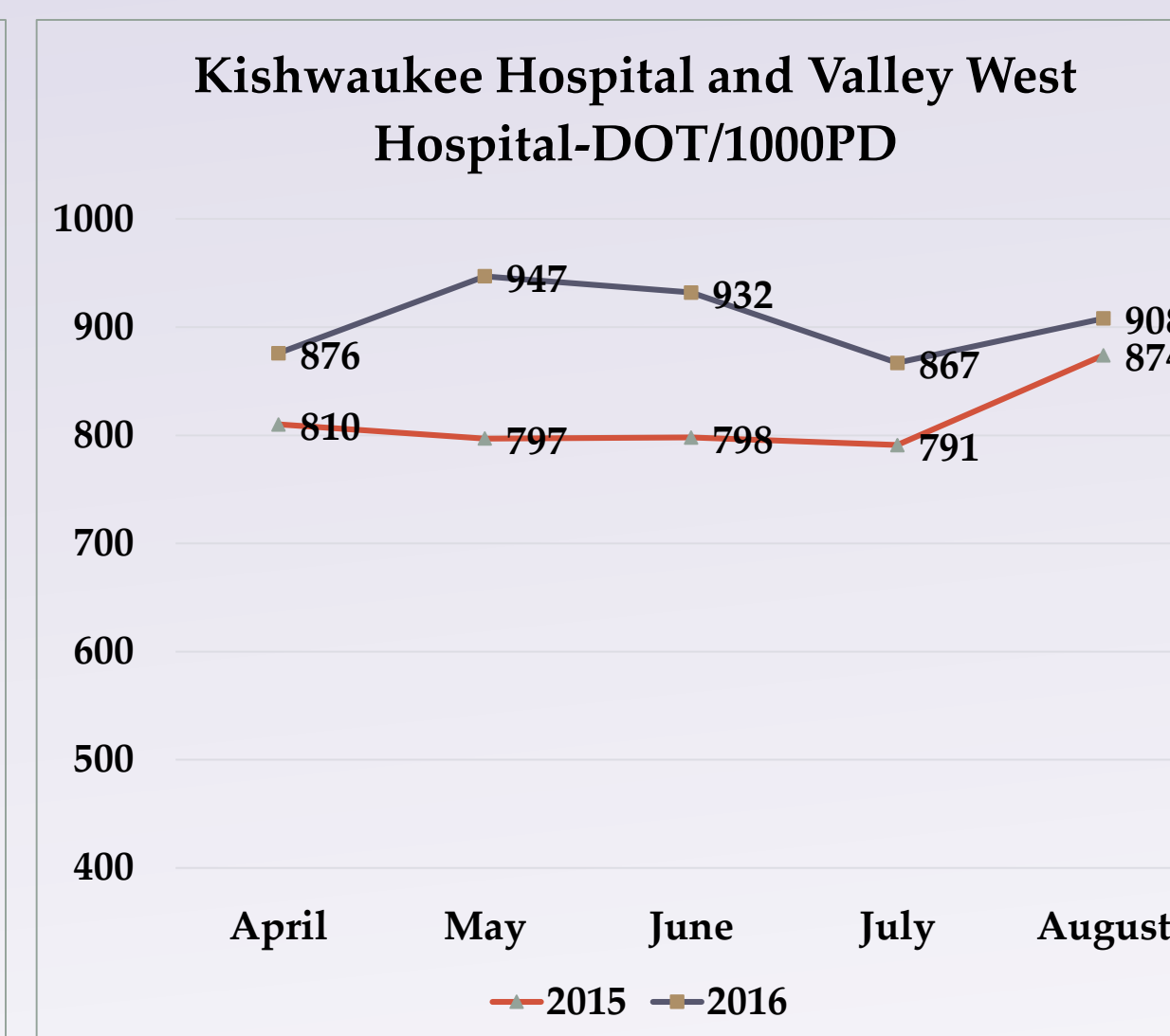
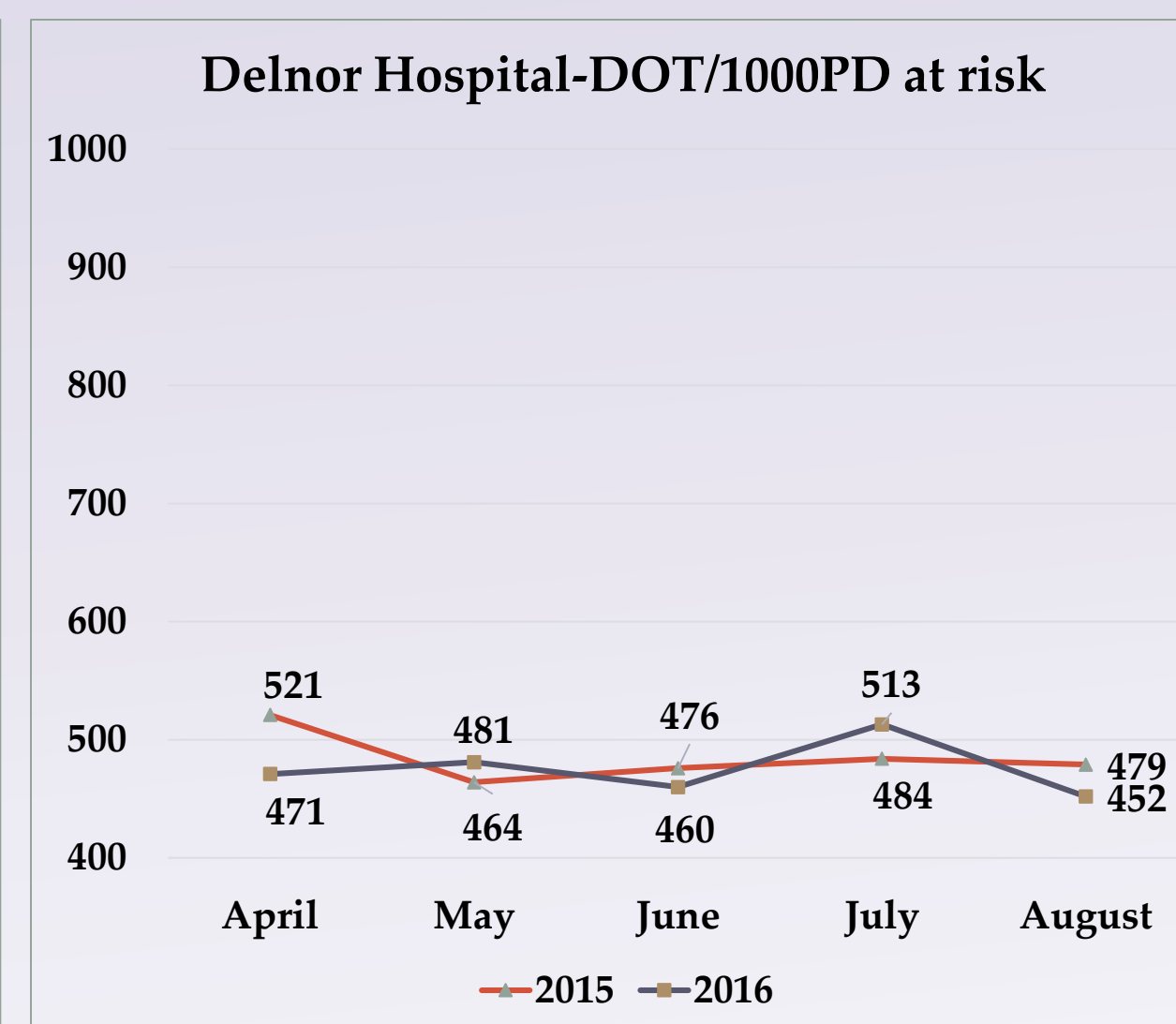
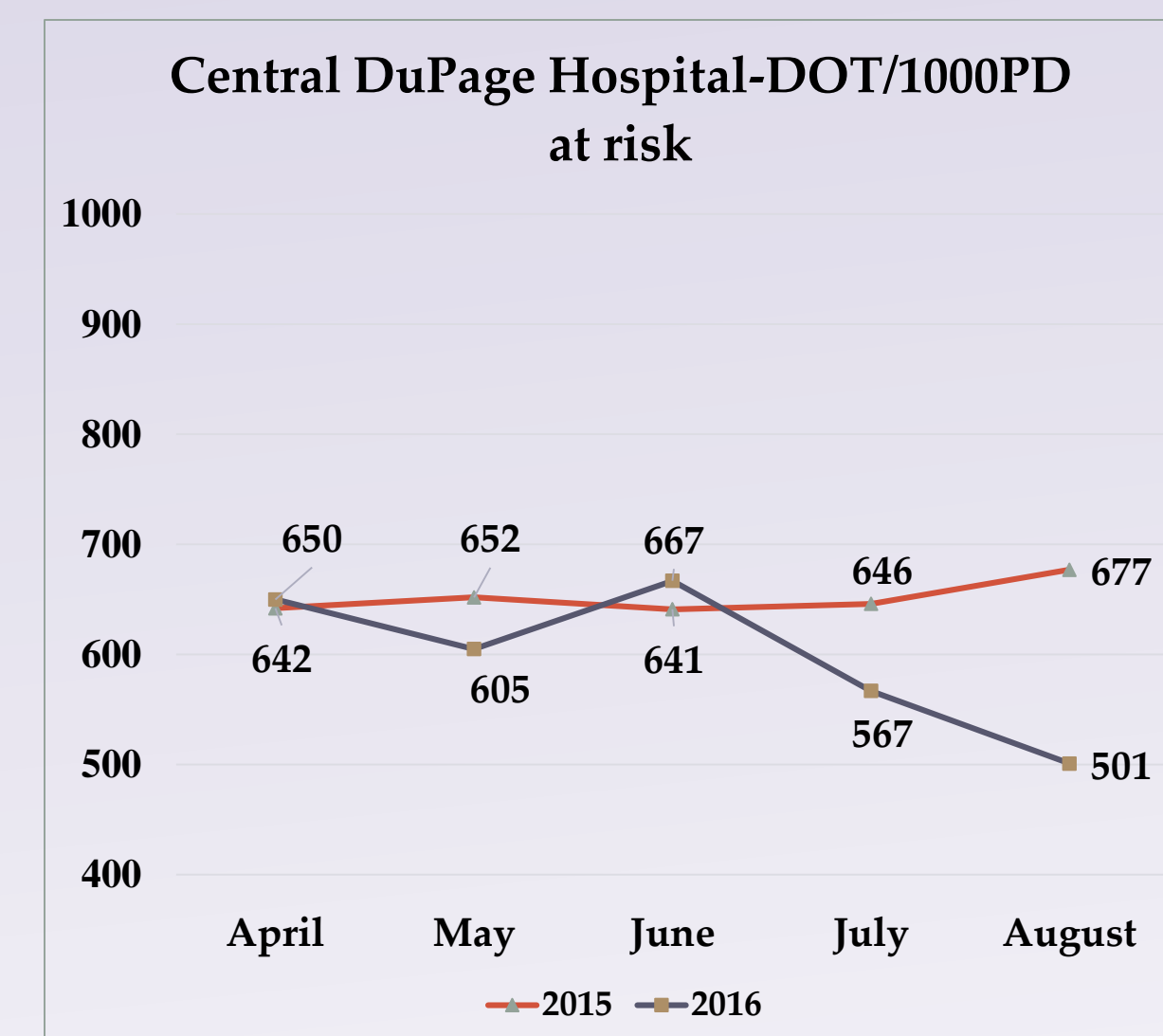
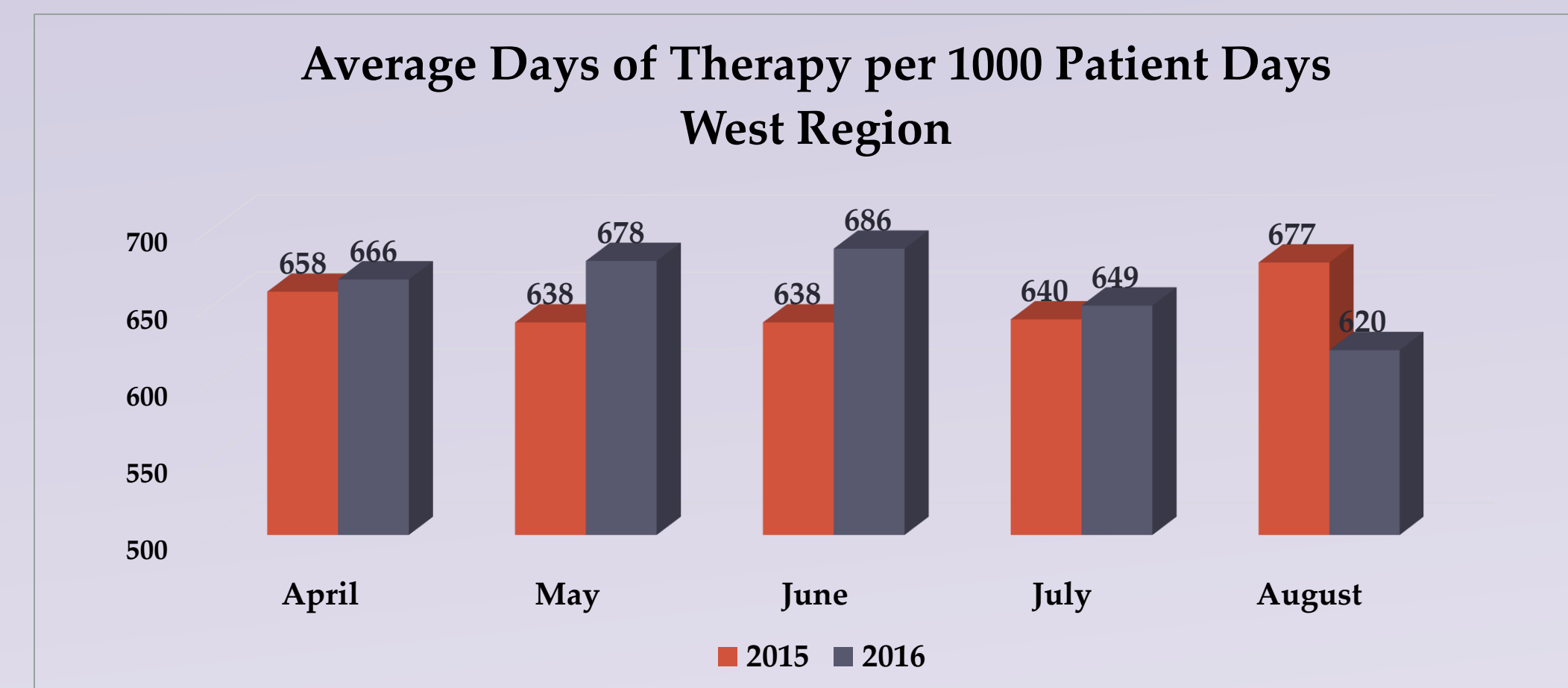
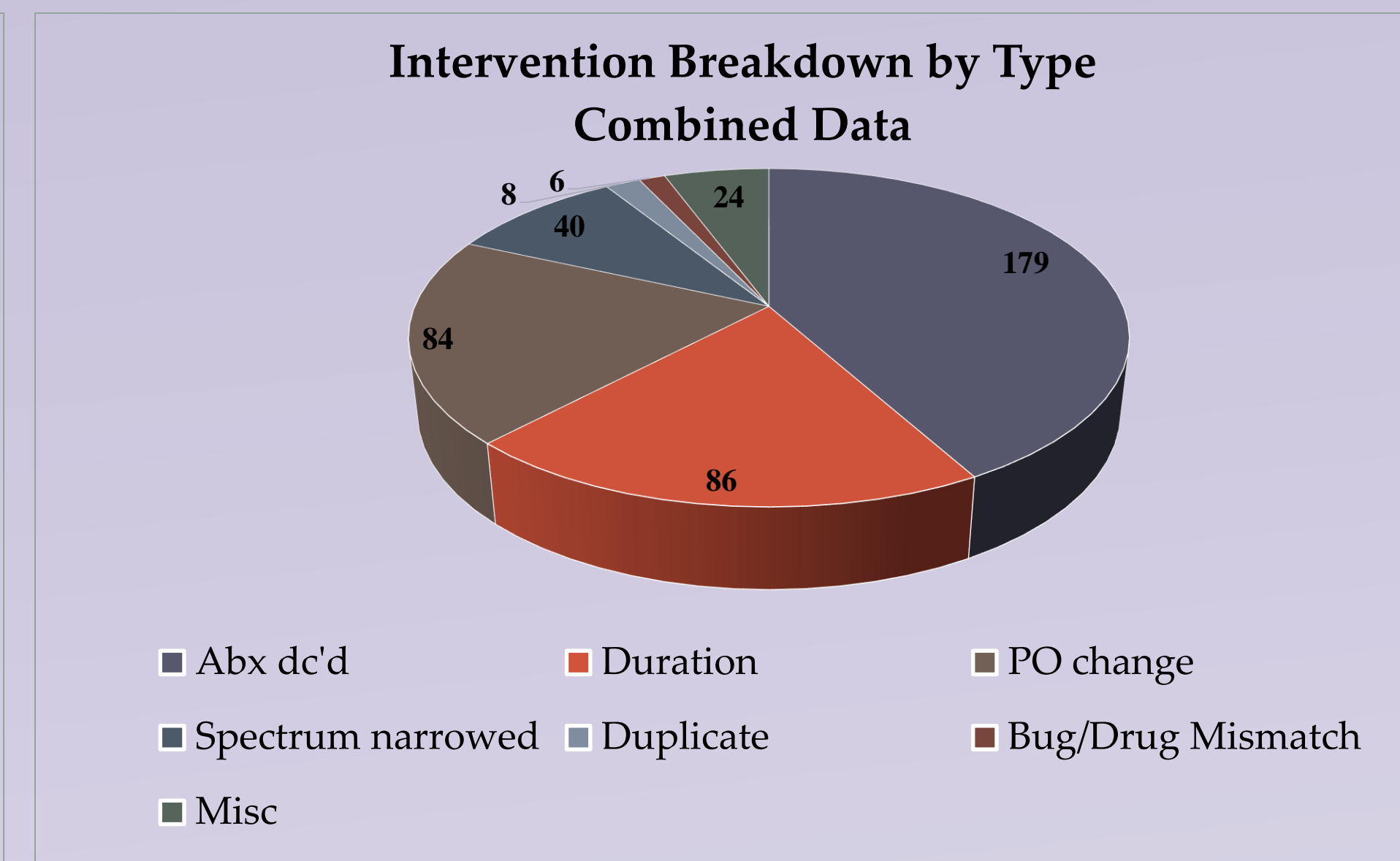
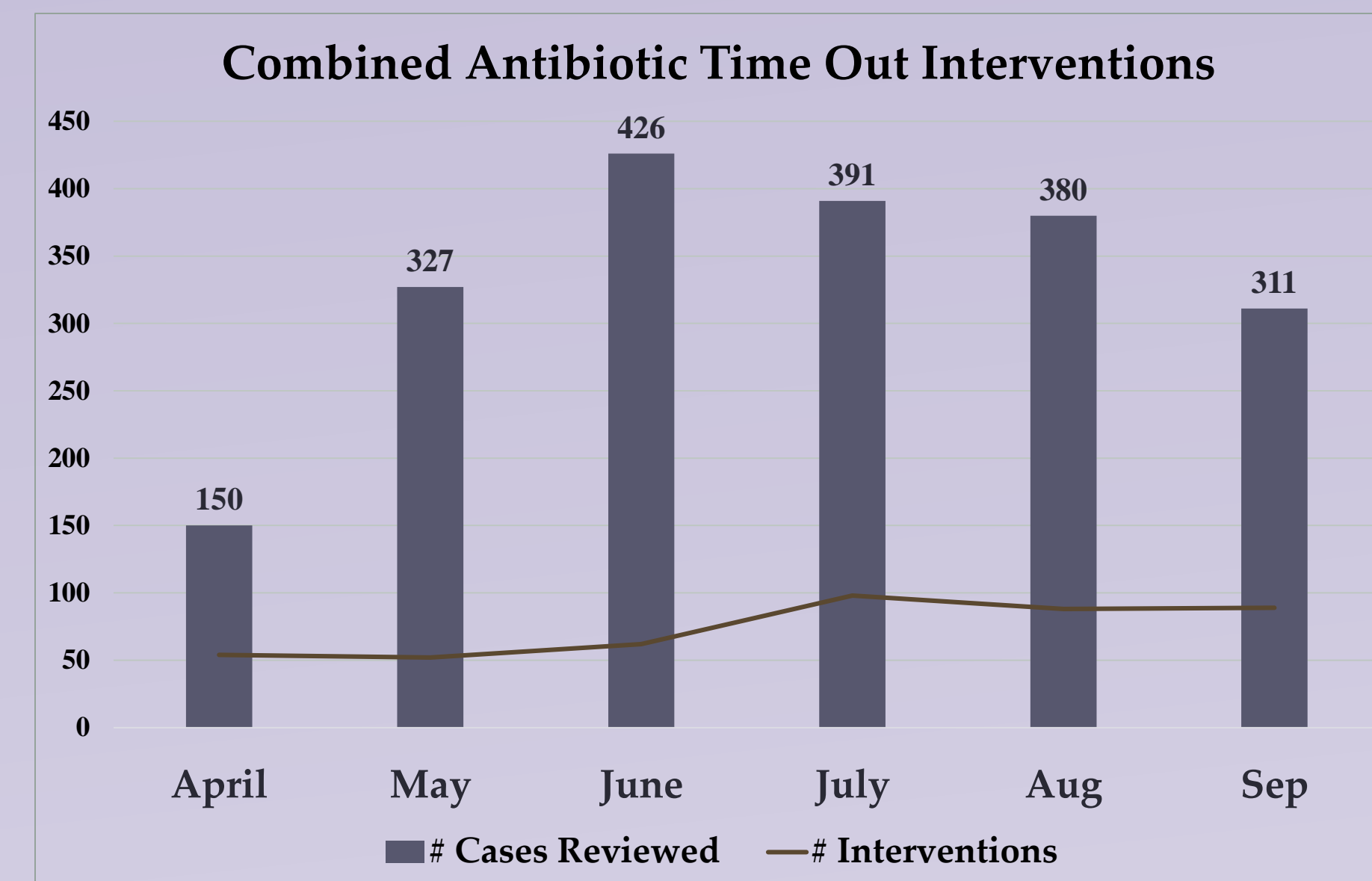
Background & Purpose

- Centers for Disease Control (CDC), The President's Council of Advisors on Science and Technology (PCAST) and Centers for Medicaid and Medicare Services (CMS) recommended that there be a regulatory requirement in place for antibiotic stewardship by the end of 2017.
- One of their recommendations is the implementation of an antibiotic time out.
- An antibiotic timeout is a structured process performed by clinicians to stop and review antibiotic therapy at a designated point in time to evaluate the appropriateness of the order, ideally occurring between 48 to 72 hours after the antibiotic is initiated
- We implemented a system-wide pharmacist-driven antibiotic time out at 72-hours in an effort to improve antibiotic utilization at our institutions.
- The purpose of this study is to evaluate the impact of an Antibiotic Time Out at 4 community hospitals between April 2016 and September 30, 2016.

Methods

- Northwestern Medicine Central DuPage Hospital: 380 bed community hospital
- ASP team (ID physicians, ID Pharm.D, infection prevention, micro lab, pharmacy)
- Northwestern Medicine Delnor Hospital: 159 bed community hospital
- ASP team (PharmD, ID physician, infection prevention, pharmacy)
- Northwestern Medicine KishHealth-Kishwaukee Hospital: 98 bed community hospital; Valley West: 25 bed critical access hospital
- ASP team (PharmD, ID physician, infection prevention, micro, lab, pharmacy)
- Design:
- Multi-center pre-post quasi-experimental study conducted to analyze the impact of a pharmacist-driven antibiotic timeout on antibiotic utilization in three acute care community hospitals and one critical access hospital
 - All patients were evaluated by a pharmacist for antibiotic appropriateness after 72 hours
 - Potential interventions identified were addressed on multi-disciplinary rounds or with the ordering physician
 - Primary outcome measure: Antibiotic Days of Therapy per 1000 patient days at risk (DOT)
 - Secondary outcome measure: Percent of interventions due to a time out
 - Outcomes are compared to a historic control group

Results



Discussion & Conclusions

- A total of 1674 patients were reviewed from mid-April through September
- There were 443 recommendations for change (26.5% intervention rate)
- Of these, 429 were accepted (96.8% acceptance rate)
- The majority of interventions accepted involved discontinuation of an antibiotic, followed by establishment of a duration and switch to enteral antibiotics
- Antibiotic days of therapy per 1000 patient days have not improved significantly in the time since the initiation of the antibiotic time out process

Limitations:

- Processes at each institution differed slightly based on staffing structure
- Acuity scores of patients from baseline to current data were not taken into account in assessment of DOT
- Overall appropriateness of antibiotic use was not assessed and is not reflected in the outcomes reported here

Conclusions:

- Implementation of an antibiotic time out is feasible in community hospital settings with varying resource availability
- Antibiotic time outs result in an increase in identification of improvement opportunities for patients' antibiotic regimens
- Appropriateness of antibiotics may be a useful outcome for future studies of the impact of antibiotic time outs

Additional ASP efforts

- Systemwide Antibiotic Stewardship Collaborative
- Physicians, Pharmacy, Nursing staff education

Acknowledgements:

Pharmacy staff at each site
Pharmacy leadership at each site

Disclosures

No author of this study has any financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.