Estimated cost impact of clinical pharmacy services in a pediatric primary care clinic

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Objectives

- Establish clinical pharmacy services within a pediatric primary care clinic
- Identify areas of impact for a clinical pharmacist
- Estimate cost-avoidance of clinical pharmacy services and interventions

Introduction

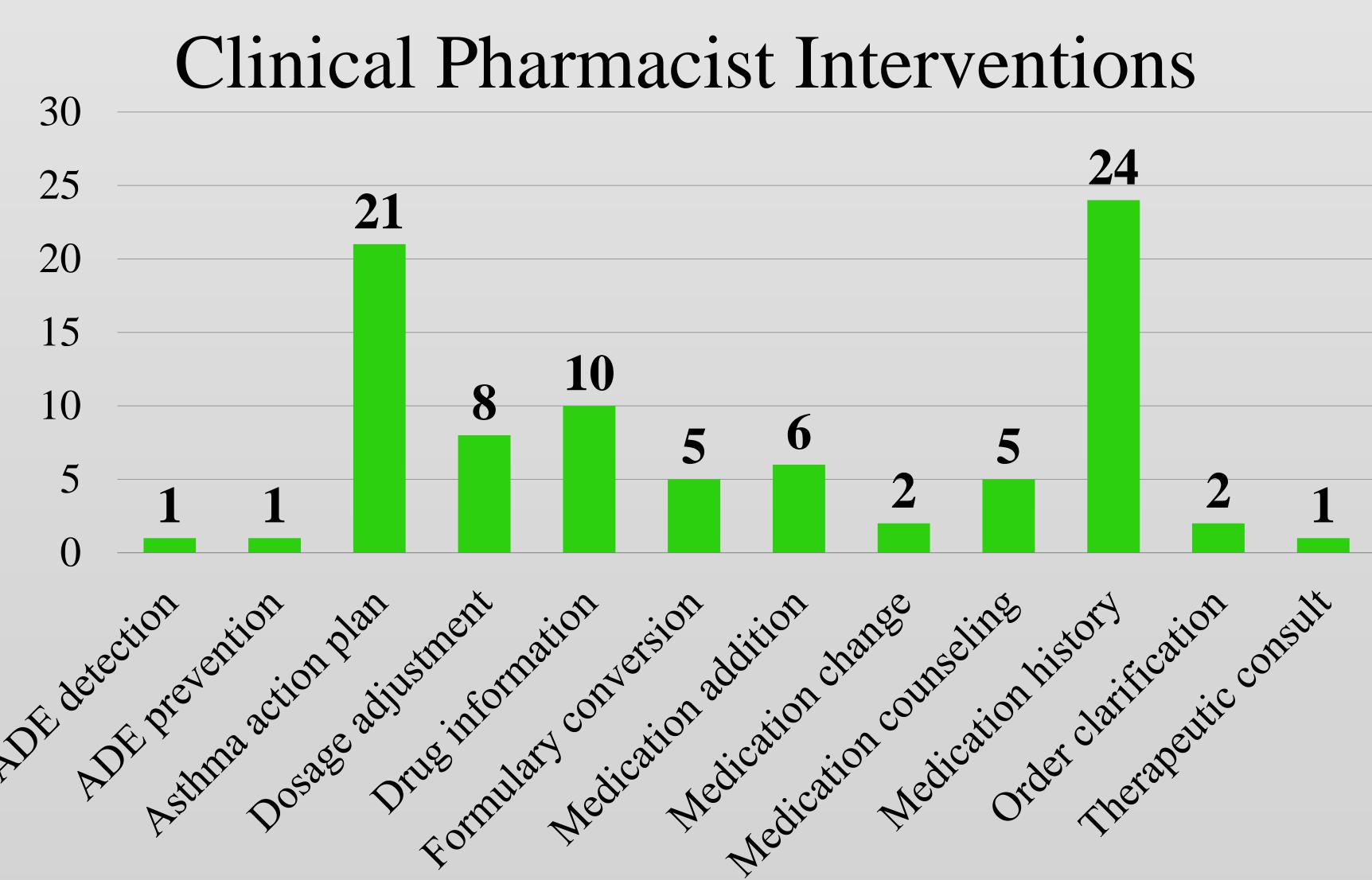
- Changes within our nation's healthcare system continue to place emphasis on primary care as the principal method to meet the ever-increasing healthcare needs of the population^{1,2}
- Utilizing pharmacists as medication therapy experts can improve patient care, while reducing cost and maximizing resources^{1,2}
- The cost-benefit of pharmacists has been well established within university and community hospitals, hospital-associated clinics, and free-standing clinics^{1,2,3}
- However, much of this information is derived from adult data
- Currently, clinical pharmacy services are not provided at Sacred Heart Health System within ambulatory care areas

Methods

- Prior to initiation of pharmacy services, providers and staff were polled as to what services may be beneficial
- A clinical pharmacist was placed in the medical resident managed pediatric primary clinic during daily operating hours
- Chart reviews, medication reconciliation, drug information, and patient counseling services were provided
- Clinical pharmacist interventions were logged in a secure database
- Estimated cost-impact was extrapolated from previously published literature based on type of intervention³

Results

- Clinical pharmacy services were offered for a total of 18 days
- A total of 86 interventions were logged
- Medication histories and Asthma Action Plans accounted for approximately half of the interventions
- Therapy manipulations (dose adjustments, formulary conversions, medication additions, and medication changes) accounted for 25% of interventions

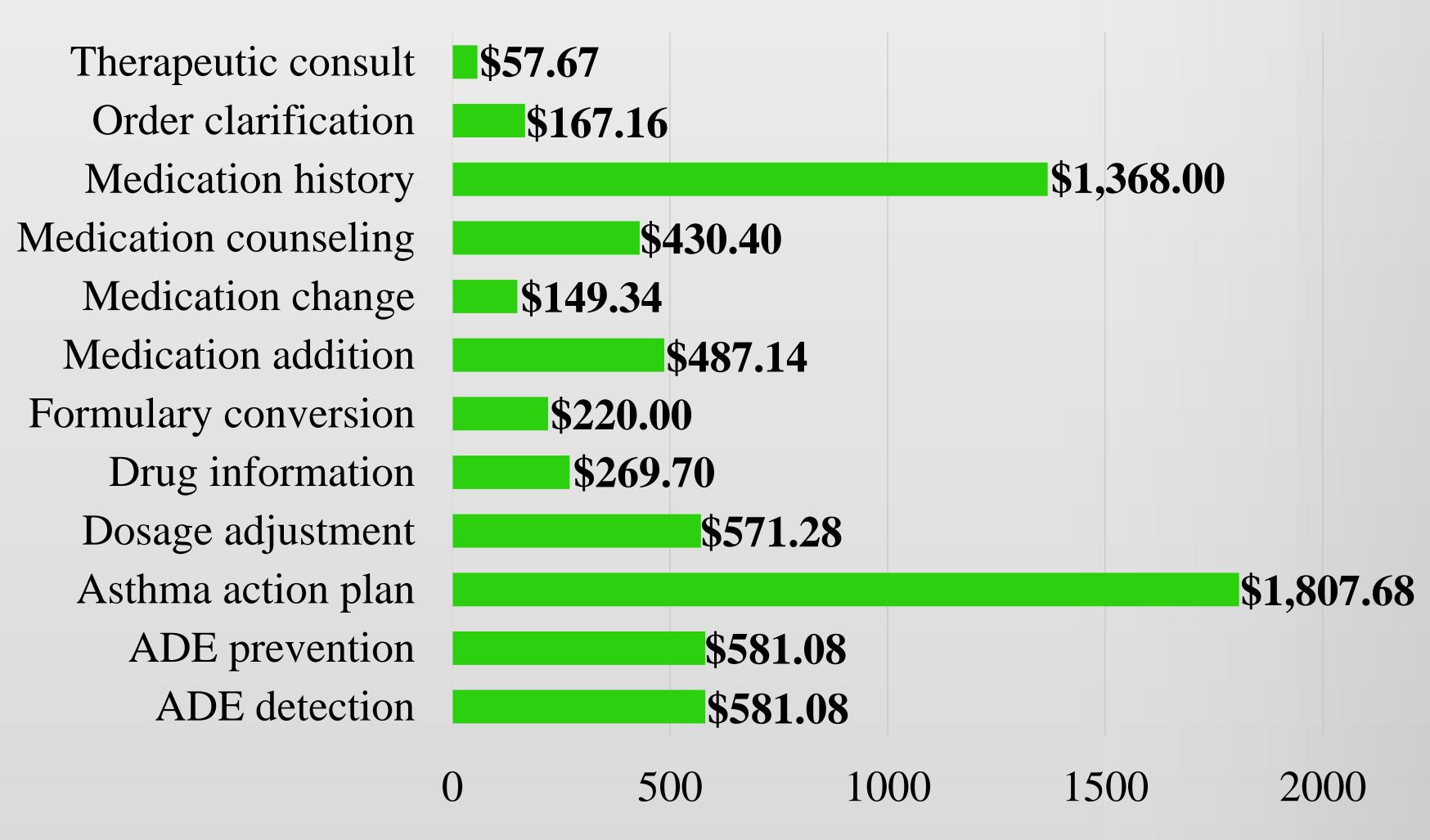


- Estimated cost-impact was extrapolated from averages cited in previous literature
- The total estimated cost-avoidance over 18 days was \$6,690.53
- The average daily cost-avoidance was estimated to be \$371.70

| Intervention Type | Intervention Total | Estimated Cost Impact ³ |
|--------------------------|---------------------------|------------------------------------|
| ADE detection/prevention | 2 | \$581.08 |
| Asthma action plan | 21 | \$86.08 |
| Dosage adjustment | 8 | \$71.41 |
| Drug information | 10 | \$26.97 |
| Formulary conversion | 5 | \$44.00 |
| Medication addition | 6 | \$81.19 |
| Medication change | 2 | \$74.67 |
| Medication counseling | 5 | \$86.08 |
| Medication history | 24 | \$57.00 |
| Order clarification | 2 | \$83.58 |
| Therapeutic consult | 1 | \$57.67 |

Results





Conclusion/Discussion

- There is considerable cost-avoidance associated with clinical pharmacy services in a pediatric ambulatory care clinic
- Cost-impact is an estimate and may not reflect the actual cost-savings or cost-avoidance of a specific intervention
- Although cost is an important outcome, the impact of a pharmacist on therapeutic outcomes should also be noted
- Pharmacists offer a unique perspective regarding costeffectiveness and considerable expertise in patient counseling
- Collaborative practice agreements may provide future areas of impact for pharmacists within this clinic

Disclosures

• The authors of this presentation have nothing to disclose concerning possible financial or personal relationships with commercial entities

References

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