(Figure 1). The median duration of CMV episode was 40 days. Seventy-one percent of the patients were treated with foscarnet for CMV infection. Acute kidney injury was the most frequent CMV treatment-related complication (67%) followed by myelosuppression (55%) and end-stage renal disease (36%). Of 56 encounters, 16% required admission to intensive care unit with a median duration of 9 days. The median length of stay for hospitalization was 23 days and healthcare cost for CMV-related hospitalization was $71,840. The median hospitalization cost and LOS varied by reason for hospitalizations, type of anti-CMV therapy and treatment-related complications (Figure 2).

Figure 1. Baseline characteristics, CMV episodes, outcomes, and cost.

Characteristics	N (%)/Mean (range)
Overall	56 (100)
Age at transplant, median (range)	48 (19-70)
Age > 40 years	36 (64)
Gender	
Female	31 (55)
Race	
Caucasian	37 (66)
Hispanic	10 (18)
African American	2 (4)
Other	3 (5)
Not available	4 (7)
CMV serostatus pre transplant	
D-/R-	1 (2)
D-/R+	26 (46)
D+/R+	23 (41)
Not available	6 (11)
Admitting center	
Site 1	46 (82)
Site 2	10 (18)
Reason for admission	
Admitted for CMV reactivation (%)	13 (23)
Admitted with CMV reactivation (%)	43 (77)
Primary malignancy	
Acute myeloid leukemia (%)	41 (73)
Acute lymphocytic leukemia (%)	38 (68)
Myelodysplastic syndrome (%)	5 (9)
Lymphoma (%)	10 (18)
Other (%)	8 (14)
Conditioning regimen	
Myeloablative/Reduce intensity conditioning (%)	39 (65)
Non myeloablative (%)	4 (7)
Not available (%)	13 (23)
Type of transplant	
Matched unrelated donor (%)	25 (49)
Matched related donor (%)	15 (27)
Haploidentical donor (%)	11 (20)
Cord transplant (%)	4 (7)
Autologous (%)	1 (2)
Time to engraftment (in days), median (range)	14 (8-88)
Acute GVHD within 30 days before CMV episode (%)	20 (36)
Use of immunosuppressants 30 days prior to episode	
Tacrolimus (%)	51 (91)
Methotrexate (%)	6 (11)
Sirolimus (%)	2 (4)
Mycophenolate (%)	16 (29)
Rituximab (%)	3 (5)
Antithymocyte globulin (%)	4 (7)

D/R: Donor/recipient; CMV: cytomegalovirus; GVHD: graft versus host disease; LOS: length of stay

Figure 2. CMV Outcomes among allo-HCT recipients

CMV episodes	
Duration of CMV episode (in days), median (range)	40 (9-116)
Peak CMV viral load by PCR, median (range)	2303 (91-26564)
Days from diagnosis to peak CMV viral load by PCR, median (range)	10 (0-95)
CMV disease (%)	16 (28)
Lung (%)	6 (10)
Gastrointestinal (%)	5 (8)
Eye (%)	1 (2)
Central nervous system (%)	1 (2)
Disseminated (%)	0 (0)
Other (%)	3 (5)
Anti CMV Therapy	
Ganciclovir (%)	28 (48)
Valganciclovir (%)	22 (40)
Foscarnet (%)	40 (71)
Cidofovir (%)	3 (5)
Other (%)	6 (10)
Intravenous immunoglobulin (%)	20 (38)
Complications of Therapy	
Acute kidney injury (%)	37 (67)
End stage renal disease (%)	20 (36)
Myelosuppression (%)	30 (55)
CMV-related Outcomes	
Admission to intensive care unit (%)	8 (16)
Duration of intensive care unit (in days), median (range)	9 (1-37)
100-day mortality (%)	15 (27)
LOS (in days), median (range)	23 (1-174)
Total direct cost for the encounter ($), median (range)	$71,840 (1,473-587,873)

Conclusion: Our study showed even a single episode of CMV-related hospitalization led to significant resource use and hospitalization costs. This study highlights the need for interventions to prevent of CMV-related hospitalization, thereby reducing associated cost and resource use.

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569. A Multidisciplinary Approach to the Pre-evaluation Process of Pediatric Solid Organ Transplant Patients

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Session: P-22. Care Strategies for Transplant Patients

Background: Pediatric transplant recipients are at increased risk of infection-related morbidity and mortality, both from opportunistic infections and vaccine-preventable diseases. Since vaccine immunogenicity may wane with organ failure and immunosuppressive therapies, it is recommended that transplant candidates are immunized early in their disease course, prior to transplant. However, transplant candidates are often incompletely immunized due to factors including complexity of care and multiple providers. A multidisciplinary approach involving Infectious Diseases (ID) is crucial to ensure that vaccination status is optimized prior to transplant and to prevent and treat infectious complications.

Methods: During the solid organ transplant evaluation process, liver, intestinal, and heart transplant candidates and their families meet with Infectious Diseases, Transplant Pharmacy, and Organ Procurement clinicians. The multidisciplinary team effort ensures that transplant candidates receive appropriate vaccines prior to transplant, based on immunization history and serology results. The team helps to manage infections diagnosed during the evaluation process (active or latent), identify risk factors for infection, optimize antimicrobial dosing based on comorbid conditions and concomitant medications, and follows patients post-transplant. Transplant candidates and their families are educated on how organ donation and organ allocation function in the US.

Results: Since launch of our multidisciplinary solid organ transplant team, we have completed pre-transplant ID evaluations on 64 patients [Table 1]. Nearly all (97%) of pre-transplant evaluated patients received vaccine optimization (booster/new vaccine doses) [Table 2]. Forty-five patients (70%) underwent organ transplant. Many intestinal (67%), cardiac (46%), and liver (27%) transplant candidates with pre-transplant evaluations required subsequent ID consultation.

Table 1

Table 1: Infectious Diseases Pre-transplantation Evaluation

	Liver	Intestine	Heart	Total
ID pretransplant evaluations Jun 2019-May 2020	15	3	46	64
Vaccine optimization based on ID evaluation	14 (93%)	3 (100%)	45 (98%)	62 (97%)
Transplanted patients Jun 2019-May 2020	14 (93%)	1 (33%)	30 (65%)	45 (70%)
Subsequent ID consult on pretransplant eval patient	4 (27%)	2 (67%)	21 (46%)	27 (42%)

Table 2

Table 2: Vaccine Optimization of Pre-transplant Patients

Vaccine	Number of patients (n/64) that required vaccine dose for catch-up or accelerated schedule
MCV4	45 (70%)
PCV13	38 (59%)
PPSV23	36 (56%)
HBV	25 (39%)
HAV	24 (38%)
HPV	20 (31%)
Hib	18 (28%)
DTaP	11 (17%)
Tdap	10 (16%)
IPV	10 (16%)

Conclusion: Multidisciplinary ID pre-transplant evaluation leads to individualized vaccine optimization and infection management. Families benefit from education and counseling as well as familiarity with the Transplant ID consult service, involved in a large percentage of these patients in their peri- and post-transplant course.

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570. "I don't know": The Typical Response When Taking Pneumococcal Immunization Histories in Kidney Transplant Candidates

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Session: P-22. Care Strategies for Transplant Patients

Background: Vaccine-preventable diseases account for significant morbidity and mortality in the kidney transplant (KT) patient population. AST Guidelines support