Lan Doan, MPH CPH
Clinical Research Coordinator

APHA 142nd Annual Meeting & Expo | New Orleans, November 18, 2014

Presenter Disclosures

Lan N. Doan

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose
Acknowledgements

- Seth Hollander, MD
- David Rosenthal, MD
- Nancy McDonald, CPNP
- Donna Lee, RN, CPNP
- Lindsay May, MD
- Beth Kaufman, MD
- Jane Anderson, MD
- Clinical staff in the Lucile Packard Children’s Hospital Heart Center
- Funded by Lucile Packard Foundation for Children’s Health

Background

- Alternative to traditional patient-doctor dyad
- Group visits are medical appointments with healthcare providers and a group of individuals with a common condition
- Benefits include more time with the provider, peer-support, and better use of resources
Rationale

• Group Visit Model (GVM) has primarily been applied to well-child visits
• Population of patients special health care needs is growing
• GVM as a solution

Objectives

• To examine the feasibility of the group visit model in a pediatric heart transplant clinic
• To examine the effectiveness in promoting medication compliance, anticipatory guidance retention, and health care utilization
Study Design

• Feasibility study to understand how acceptable the GVM was
  – Patient Satisfaction
  – Provider Satisfaction
  – Attendance

Measurable Outcomes

• Patient and Provider Satisfaction
• Attendance
• Average Clinic Time
• Health Care Utilization
• Medication Compliance
• Anticipatory Guidance Retention
Study Timeline

- Study Setup (Jul-Sept 2013)
- Patient Recruitment (Nov-Dec 2013)
- Group Visit Intervention (Jan-Dec 2014)
- Data Analysis and Manuscript (Oct 2014-Feb 2015)

Group Visit Facilitator Training

- Training for physicians, nurse practitioners, fellows, and coordinator
- Dr. Jane Anderson, UCSF Professor Emeritus of Pediatrics
Group Visit Planning

- Perceived Barriers
- Scheduling appointments
- Reserving rooms

Participant Eligibility

- Inclusion Criteria
  - Patients must have had a heart transplant
  - Caregivers must be the primary caregiver
  - Must speak English
- Exclusion Criteria
  - Do not speak English
  - Active rejection/medically unstable
  - Special health care needs
Study Arms

- Group 1:
  - Patients less than one year post-transplant
  - Met every month for six months
- Group 2:
  - Patients greater than one year post-transplant
  - Met every two months for six months

Participant Recruitment

- Recruited from Heart Center in Lucile Packard Children’s Hospital
- Consent process
- $50 incentive
Traditional Clinic Visit Schedule

Check in → Vitals → Labs/EKG → ECHO → 1-1 Exam

Group Medical Visit Schedule

Check in → Vitals → Labs/EKG → ECHO → 1-1 Exam → Group Visit → Follow up Call

Lucile Packard Children's Hospital Stanford

Stanford Medicine
Group Medical Visit Schedule

Check in

Vitals

• Intake Survey
• Pre-test Survey

Labs/EKG

• Labs could be done before, during or after clinic visit
• Labs and/or EKG was not always required
Group Medical Visit Schedule

- Four ECHO slots were blocked off for the group visit
- ECHOs were not always required
- ECHOS could be done before or during clinic visit

Group Medical Visit Schedule

- Approximately 10 minutes of private time
- Only standard of care treatment being withheld (traditional one-on-one)
Group Medical Visit Schedule

- Approximately 1 hour
- Pre-selected topics and patient initiated topics
- Group discussion
- Post-test
- Patient Satisfaction Survey

Group Medical Visit Schedule

- A follow-up phone call from provider placed by end of the day
- Unanticipated clinical events were recorded
Data Collection Instruments

- Intake Survey
- Anticipatory Guidance Test
- Patient Satisfaction
- Provider Satisfaction
- Attendance
- Clinic Times
- Unanticipated calls and visits

Patient Satisfaction

- 5-point Likert scale
  - Strongly Agree, Somewhat Agree, Neutral, Somewhat Agree, Strongly Disagree, Not Applicable
  - Understood info discussed
  - Enough time during 1-on-1
  - Comfort communicating in the group
  - Recommend group visits to family or friends

- Overall satisfaction (Very good, Good, Fair, Poor)
Provider Satisfaction

- 5-point Likert scale
  - Group visits added to length of visits
  - Enough time during 1-on-1
  - Was able to address more concerns
  - Group visit supported preventative care

- Barriers to implementation

- Overall satisfaction (Very good, Good, Fair, Poor)

Results

- Patient Population
- Patient Satisfaction
- Provider Satisfaction
- Attendance
Results: Patient Population

- **Group 1: Less than 1-year post-transplant**
  - 3 patients and 4 caregivers
  - Patient ages 11 months to 17 years
- **Group 2: More than 1-year post-transplant**
  - 3 patients and 3 caregivers
  - Patient ages 7 to 15

Results: Patient Satisfaction

<table>
<thead>
<tr>
<th>Question</th>
<th>Very Good (n=6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your overall rating of the GVM?</td>
<td>100% (6/6)</td>
</tr>
<tr>
<td>I would recommend group visits to my family or friends.</td>
<td>100% (6)</td>
</tr>
<tr>
<td>I felt comfortable communicating with the group about heart transplant issues.</td>
<td>100% (6)</td>
</tr>
<tr>
<td>I had enough time to ask my questions during the group visit.</td>
<td>100% (6)</td>
</tr>
<tr>
<td>I had enough time with the physician during the one-on-one exam.</td>
<td>100% (6)</td>
</tr>
</tbody>
</table>
Results: Provider Satisfaction

<table>
<thead>
<tr>
<th>Question</th>
<th>Very Good (n=9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your overall rating of the GVM?</td>
<td>100% (9)</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>I would like to see the GVM implemented routinely at the clinic.</td>
<td>100% (9)</td>
</tr>
</tbody>
</table>

---

Results: Provider Satisfaction

- “Has made a huge difference in patient care.”
- “Very efficient use of space and staff in the outpatient setting.”
- “Great opportunity to learn what topics are important to families and how many of them cope with various concerns or issues.”
Results: Attendance

• 100% attendance in both groups
• No patient withdrawal

Highlights

• 100% attendance
• Participant retention
• Patients wanted to extend the group visit
• Director of the Heart Center asked for group visits to be continued
Challenges

• Study Design
• Patient Recruitment
• Room reservations
• Scheduling

Limitations

• Modest sample size
• Patient population did not have post-transplant complications
• ECHO scheduling blocks are atypical
Conclusion

• GVM can be applied to the pediatric heart transplantation population
• High patient and provider satisfaction
• Benefit of peer-support

Next Steps

• GVM needs to be evaluated in a larger sample size
• GVM needs to be expanded to care of other pediatric solid-organ transplant populations
• GVM needs to be expanded to other pediatric chronic conditions