



2020 Education Needs Assessment Report – PCOP

The 2020 AST Education Needs Assessment Survey was distributed to all AST members from February 6 to March 6, 2020. The survey included a topical specialty section based on each of AST’s Communities of Practice (COP).

134 participants began the “Pediatrics” specialty section and 120 completed the section. A breakdown of the information gathered from these participants is provided in this report.

I. “Pediatrics” Specialty Section Participants

Role of Participants:

Participants were asked, “Which best describes you? (please choose one).” Based on the 134 participants who started the PCOP specialty section, the chart below outlines the roles that were represented (results from all participants in the survey are provided for comparison).

Role	Specialty Participants	Overall Participants
Physician/Primarily Research	15 (11.2%)	65 (8.7%)
Physician/Primarily Clinical	55 (41.0%)	316 (42.4%)
Surgeon/Primarily Research	0	12 (1.6%)
Surgeon/Primarily Clinical	13 (9.7%)	45 (6.0%)
Administrator	5 (3.7%)	34 (4.6%)
Advanced Practice Provider	8 (6.0%)	43 (5.8%)
Histocompatibility Specialist	4 (3.0%)	23 (3.1%)
Nurse/Transplant Coordinator	1 (0.8%)	16 (2.1%)
Pharmacist	26 (19.4%)	104 (14.0%)
Psychologist/Psychiatrist	0	12 (1.6%)
Social Worker	0	19 (2.6%)
Researcher/Scientist	3 (2.2%)	37 (5.0%)
Other	4 (3.0%)	19 (2.6%)

Affiliation of Participants:

Participants were asked what is their “*Affiliation (please choose one.)*” Based on the 134 participants who started the PCOP specialty section, the chart below outlines the affiliations that were represented (results from all participants in the survey are provided for comparison).

Affiliation	Specialty Participants	Overall Participants
Academic	76 (56.7%)	427 (57.3%)
Government or Military	3 (2.2%)	9 (1.2%)
Hospital	36 (34.3%)	256 (34.4%)
Industry	2 (1.5%)	16 (2.1%)
Organ Procurement Organization	2 (1.5%)	15 (2.0%)
Stand-alone Private Practice	2 (1.5%)	13 (1.7%)
Other	3 (2.2%)	9 (1.2%)

Experience Level of Participants:

Participants were asked to “*Please enter your level of experience/years in practice.*” Based on the 134 participants who started the PCOP specialty section, the chart below outlines the levels of experience that were represented (results from all participants in the survey are provided for comparison).

Level of Experience	Specialty Participants	Overall Participants
Not yet in training	0	5 (0.7%)
In training (resident)	4 (3.0%)	16 (2.1%)
In training (fellow)	8 (6.0%)	46 (6.2%)
<5 years	25 (18.7%)	182 (24.4%)
6-10 years	31 (23.1%)	147 (19.7%)
11-15 years	21 (15.7%)	123 (16.5%)
16-20 years	20 (14.9%)	81 (10.9%)
21+ years	25 (18.7%)	145 (19.7%)

II. PCOP's "Pediatrics" Specialty Section Data

PCOP Topic Lists:

A list of important and timely topics was created for the 2020 Needs Assessment Survey specialty sections by PCOP Leadership and the AST Education Committee. Participants were asked to "Rate each educational topic's importance to you" as either 1) "Not interested," 2) "Interested but have sufficient knowledge" or 3) "Interested & want/need to learn more."

Separate lists were created for "General" Pediatrics topics and the various "Specialty" Pediatrics topics presented in the survey. Each member who selected the "Pediatrics" specialty was asked to provide feedback on all lists.

Below are the results from the 120 participants who completed this specialty section. Pediatrics topic results have been grouped into "General" and "Specialty" lists.

PCOP (General) Topics – Overall Ranking: The topic list has been ranked below based on a weighted mean score of up to 3.0, with "Interested & want/need to learn more" weighted highest, "Interested but have sufficient knowledge" weighted next highest, and "Not interested" weighted lowest (out of 120 results).

1. Newer immunosuppressive medications in transplantation and for the treatment of allograft rejection: 2.84
2. Infectious disease issues: Prevention of infection (resistant infections) in hospitalized transplant patients and best strategies for maximizing vaccination and vaccination response pre- and post-solid organ transplant: 2.77
3. Immunosuppression withdrawal/minimization: Which to try, who to try it for, and how to do it: 2.72
4. Re-transplantation: Who, when, and how to ensure best outcomes: 2.68
5. Managing recurrent diseases post-transplant: 2.67
6. Prevention, diagnosis and management of antibody-mediated graft injury: 2.63
7. Organ allocation: Defining the rights of children to transplant, developing consistency between the different organs in terms of pediatric priorities, and developing a strategy to implement new allocation policies: 2.62
8. Approach to multi-organ transplant in pediatrics (liver/kidney, heart/liver, heart/kidney, etc.): 2.61
9. Transition to adult care: What is the data regarding outcomes of pediatric recipients post-transition, what are the metrics for successful transition, and what activities, programs and tools (print, Web, mobile, etc.) provide the most impact on transition readiness, healthcare self-management and adherence?: 2.48
10. Solid organ failure in neonates and infants: 2.47
11. Optimizing sexual health and normal maturation after transplantation- appropriate screening, education and follow up: 2.41
12. Developing a multi-disciplinary transplant team, including engagement of the PCP and role definition for each member: 2.38

PCOP (Specialty) Topics – Overall Ranking: The topic list has been ranked below based on a weighted mean score of up to 3.0, with “*Interested & want/need to learn more*” weighted highest, “*Interested but have sufficient knowledge*” weighted next highest, and “*Not interested*” weighted lowest (out of 120 results).

1. Nephrology - Examine pediatric aspects of paired kidney donation and the involvement of pediatric candidates in PKD schemes: 2.28
2. Nephrology - The role of dialysis in the peri-operative management of the non-renal solid organ transplant recipient: 2.21
3. Gastroenterology/Hepatology - Role of extracorporeal support (MARS et al) as a bridge to liver transplantation: 1.95
4. Cardiology - Use of devices as a bridge to transplantation: 1.86
5. Gastroenterology/Hepatology - How to optimize the potential of splitting suitable organs to maximize utility of donated livers: 1.81
6. Gastroenterology/Hepatology - Referral for liver transplantation: Why, when and how best to do it: 1.80
7. Cardiology - Chronic infections after cardiac transplantation: 1.78
8. Pulmonology - Biomarkers for rejection and/or graft failure: 1.73
9. (Tied) Pulmonology - Infectious disease considerations for pediatric lung transplantation: 1.70
(Tied) Intestinal - When should a liver be included with an intestinal transplant?: 1.70
11. Intestinal - Evolving indications for intestine transplantation – e.g. is there a quality of life indication?: 1.68
12. Cardiology - Early predictor of cardiac allograft vasculopathy: 1.65

PCOP (General) Topics – “Interested and want/need to learn more” Only: The topic list has been ranked below based exclusively on the number of “*Interested and want/need to learn more*” results (out of 120 results).

1. Newer immunosuppressive medications in transplantation and for the treatment of allograft rejection: 107
2. Infectious disease issues: Prevention of infection (resistant infections) in hospitalized transplant patients and best strategies for maximizing vaccination and vaccination response pre- and post-solid organ transplant: 98
3. Immunosuppression withdrawal/minimization: Which to try, who to try it for, and how to do it: 95
4. Managing recurrent diseases post-transplant: 94
5. Re-transplantation: Who, when, and how to ensure best outcomes: 93
6. Approach to multi-organ transplant in pediatrics (liver/kidney, heart/liver, heart/kidney, etc.): 91
7. Organ allocation: Defining the rights of children to transplant, developing consistency between the different organs in terms of pediatric priorities, and developing a strategy to implement new allocation policies: 89
8. Prevention, diagnosis and management of antibody-mediated graft injury: 88
9. (Tied) Solid organ failure in neonates and infants: 79
(Tied) Transition to adult care: What is the data regarding outcomes of pediatric recipients post-transition, what are the metrics for successful transition, and what activities, programs and tools (print, Web, mobile, etc.) provide the most impact on transition readiness, healthcare self-management and adherence?: 79
11. Optimizing sexual health and normal maturation after transplantation- appropriate screening, education and follow up: 77
12. Developing a multi-disciplinary transplant team, including engagement of the PCP and role definition for each member: 63

PCOP (Specialty) Topics – “Interested and want/need to learn more” Only: The topic list has been ranked below based exclusively on the number of “Interested and want/need to learn more” results (out of 120 results).

1. Nephrology - Examine pediatric aspects of paired kidney donation and the involvement of pediatric candidates in PKD schemes: 70
2. Nephrology - The role of dialysis in the peri-operative management of the non-renal solid organ transplant recipient: 65
3. Gastroenterology/Hepatology - Role of extracorporeal support (MARS et al) as a bridge to liver transplantation: 53
4. Cardiology - Use of devices as a bridge to transplantation: 46
5. (Tied) Pulmonology - Biomarkers for rejection and/or graft failure: 42
(Tied) Cardiology - Chronic infections after cardiac transplantation: 42
(Tied) Gastroenterology/Hepatology - How to optimize the potential of splitting suitable organs to maximize utility of donated livers: 42
8. Pulmonology - Infectious disease considerations for pediatric lung transplantation: 41
9. (Tied) Intestinal - Evolving indications for intestine transplantation – e.g. is there a quality of life indication?: 37
(Tied) Intestinal - When should a liver be included with an intestinal transplant?: 37
11. Gastroenterology/Hepatology - Referral for liver transplantation: Why, when and how best to do it: 36
12. Cardiology - Early predictor of cardiac allograft vasculopathy: 35

PCOP (General) Topics – “Not interested” Only: The following topics received the highest number of “Not interested” results (out of 120 results).

- Optimizing sexual health and normal maturation after transplantation- appropriate screening, education and follow up: 28
- Solid organ failure in neonates and infants: 23
- Transition to adult care: What is the data regarding outcomes of pediatric recipients post-transition, what are the metrics for successful transition, and what activities, programs and tools (print, Web, mobile, etc.) provide the most impact on transition readiness, healthcare self-management and adherence?: 21
- Approach to multi-organ transplant in pediatrics (liver/kidney, heart/liver, heart/kidney, etc.): 18
- Developing a multi-disciplinary transplant team, including engagement of the PCP and role definition for each member: 18

PCOP (Specialty) Topics – “Not interested” Only: The following topics received the highest number of “Not interested” results (out of 120 results).

- Cardiology - Early predictor of cardiac allograft vasculopathy: 77
- Pulmonology - Infectious disease considerations for pediatric lung transplantation: 77
- Intestinal - Evolving indications for intestine transplantation – e.g. is there a quality of life indication?: 75
- Pulmonology - Biomarkers for rejection and/or graft failure: 75
- Intestinal - When should a liver be included with an intestinal transplant?: 73

PCOP Question on Pediatrics Topics Representation at Events: Participants were asked “Do you feel that pediatric topics are sufficiently represented at AST/ASTS meetings (including the American Transplant Congress)?” Here are the results.

Pediatric Topics Sufficiently Represented	No# of Times Selected
Yes	46 (38.3%)
No	74 (61.7%)

Participants also had the option to provide additional feedback on this question. These additional comments are compiled below:

- Last year’s meeting did not really provide me with any new information on pediatric transplant management. It was more beneficial to attend the adult sessions than the pediatric sessions given the information being presented there was new and more important to help stay ahead in the field of pediatrics.
- Pediatric topics are underrepresented at ATC, but there has been minor improvement over the past 5 years
- I do believe the pediatric topics and representation has improved in the last 3-5 years but could be improved further by having additional offerings
- The sessions focused on pediatrics seem few and far between and tend to have the same speakers and similar topics at the annual meetings
- It would be helpful to have pediatric representation in the program committee for ATC.
- Please consider adding more pediatric and adolescent-focused sessions at meetings, including AST Fellows Symposium.
- Ethics and policy
- I will have to admit I have not managed to attend the last few meetings
- Can always use more
- Would love to see even more pediatric representation at the AST/ASTS meetings!
- Need more, e.g. PTLT, pediatric surgical topics, pediatric specific biomarkers
- Doing better, but still room for improvement. There are definitely time slots where there are no pediatric talks. Have you thought about putting a pediatric person on the planning committee?
- Timing of sessions is key. Overlapping sessions can kill participation for such a relatively small interest group within the wider Society. I'd also recommend thinking about how to incorporate a "pediatric angle" into existing sessions.
- Need a pediatric planning committee member
- I would have preferred to answer this question less affirmatively since I have not yet attended an AST meeting and therefore cannot answer this question

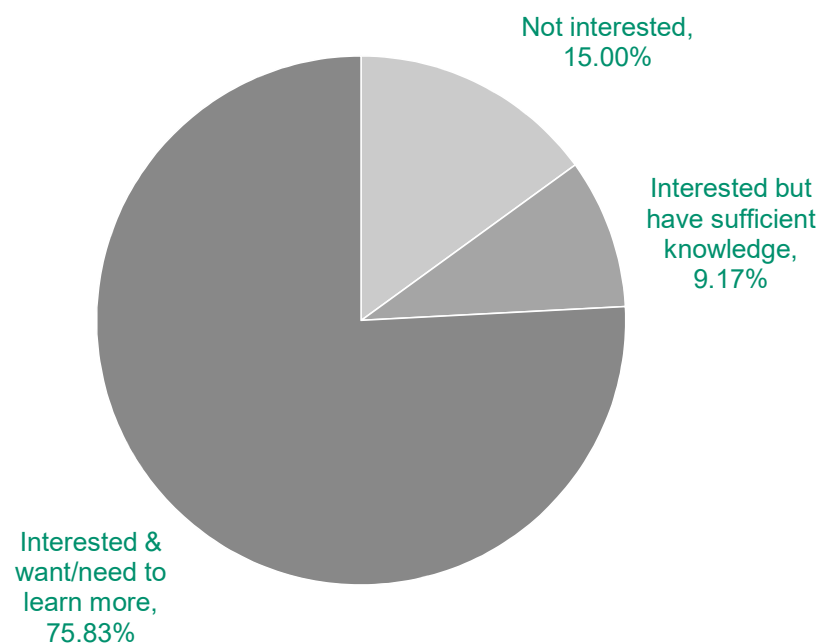
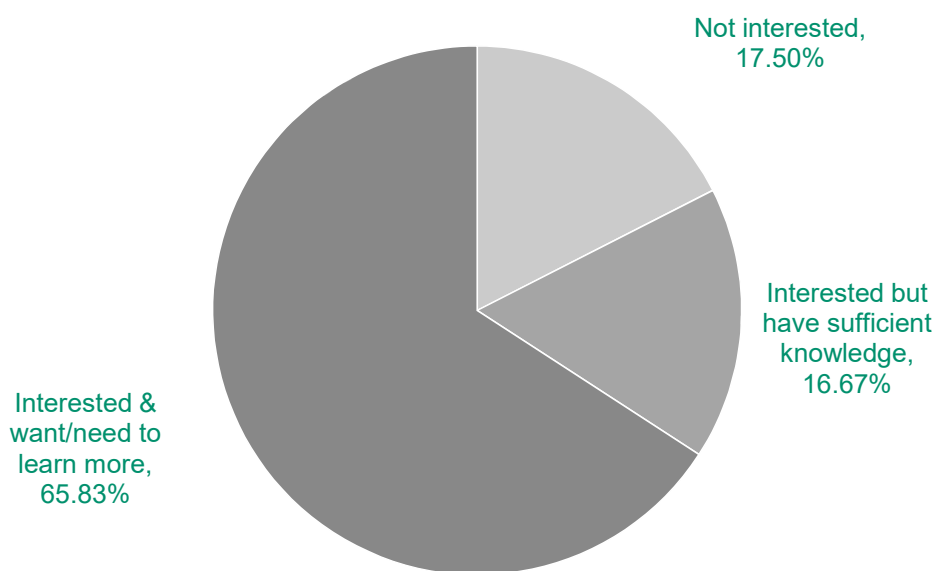
Please see the pie charts on the following pages for a topic-by-topic breakdown of participant interest in each topic.

If you have follow-up questions, or would like additional details on a result, please contact the AST Education Program Manager, Brian Valeria (bvaleria@myast.org) for more information.

2020 Education Needs Assessment: General Pediatrics Topics

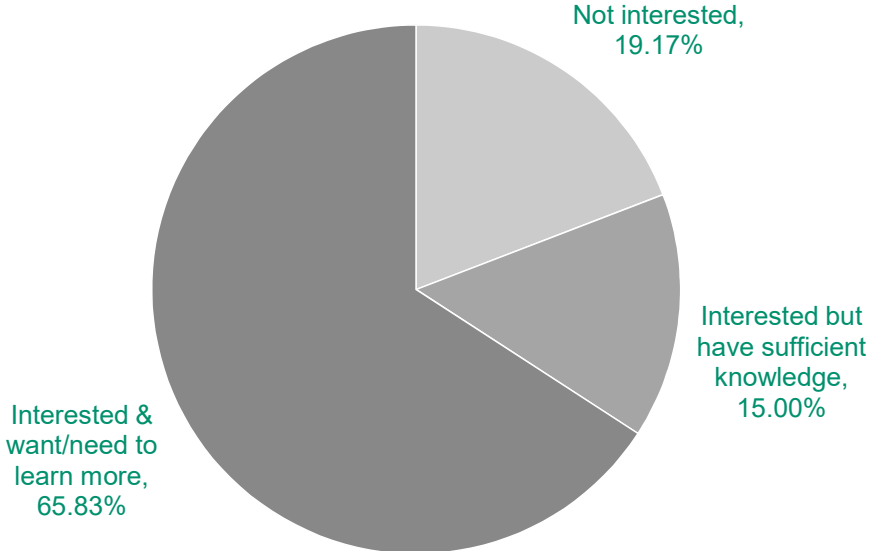
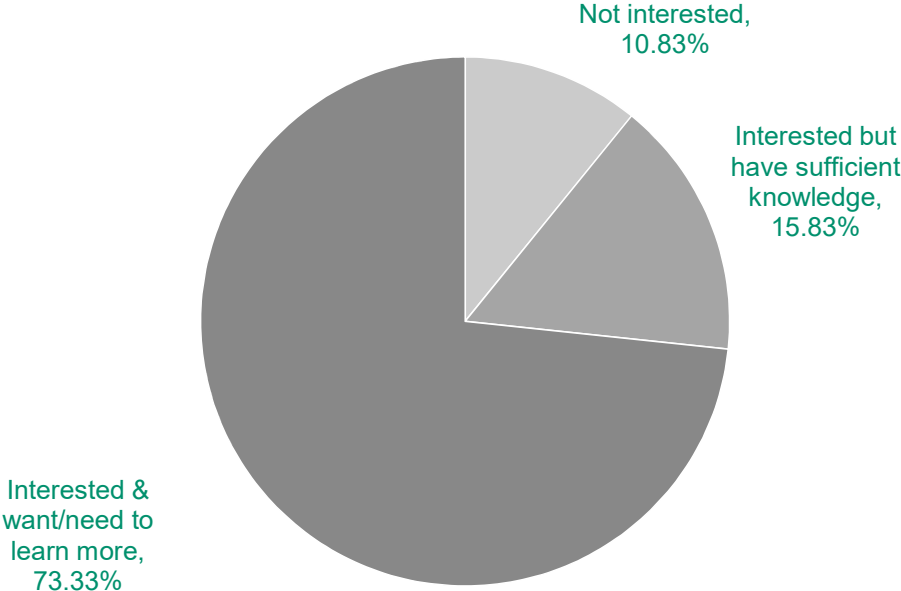
Transition to adult care: What is the data regarding outcomes of pediatric recipients post-transition, what are the metrics for successful transition, and what activities, programs and tools (print, Web, mobile, etc.) provide the most impact on transition readiness, healthcare self-management and adherence?

Approach to multi-organ transplant in pediatrics (liver/kidney, heart/liver, heart/kidney, etc.)

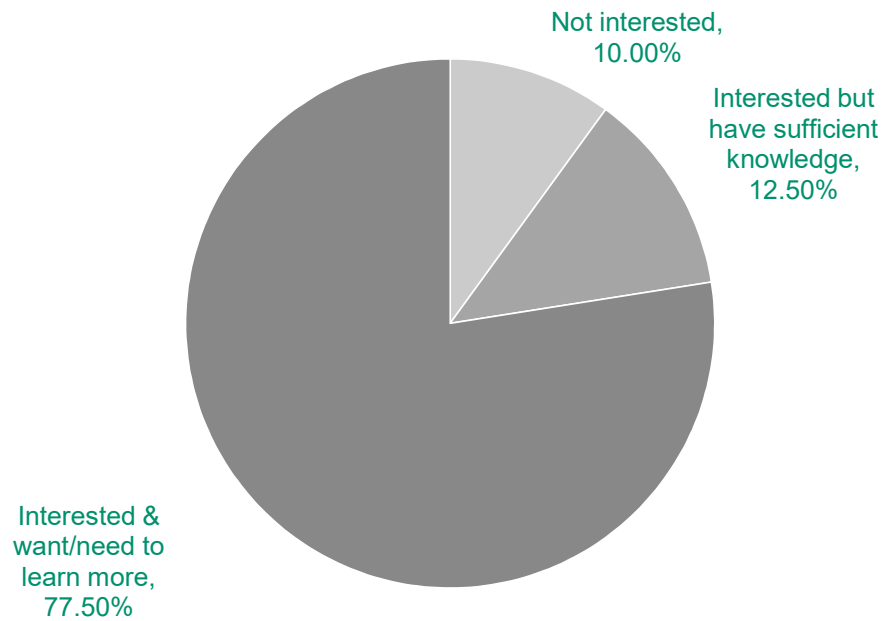


Prevention, diagnosis and management of antibody-mediated graft injury

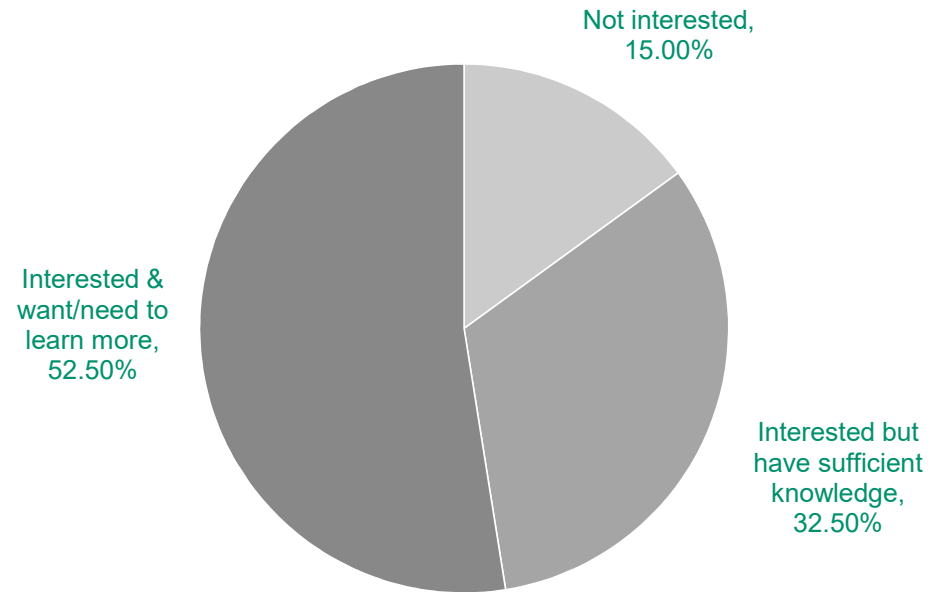
Solid organ failure in neonates and infants



*Re-transplantation:
Who, when, and how to ensure best outcomes*

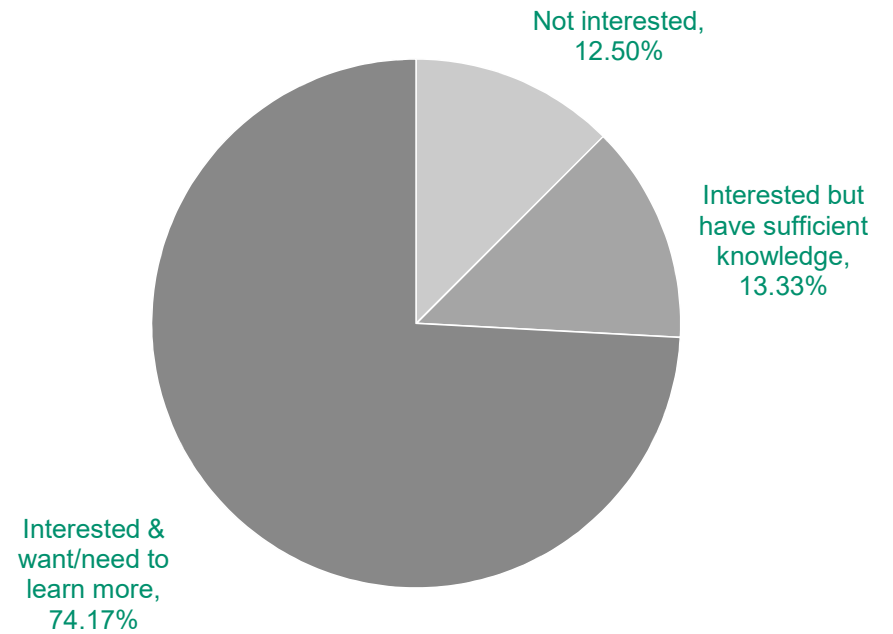
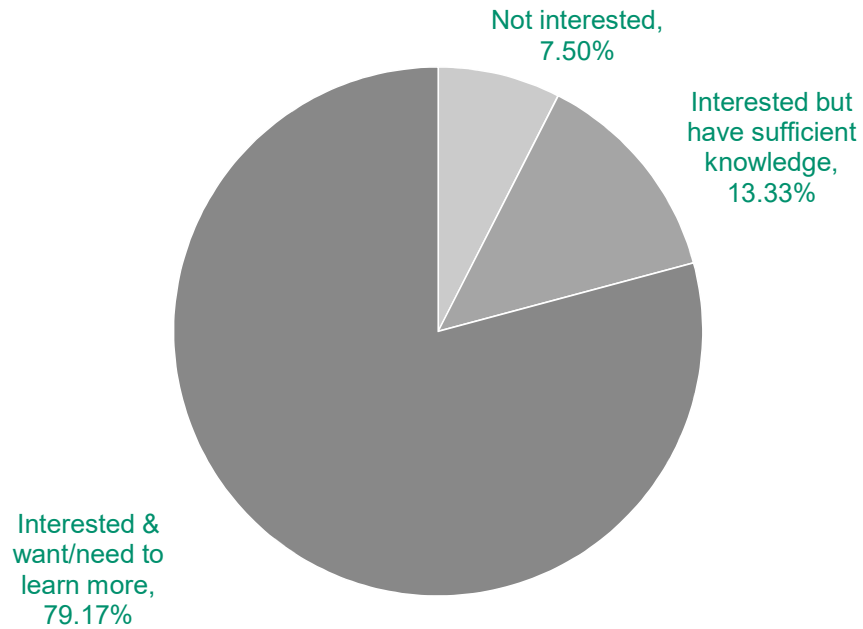


*Developing a multi-disciplinary transplant team, including
engagement of the PCP and role definition for each
member*



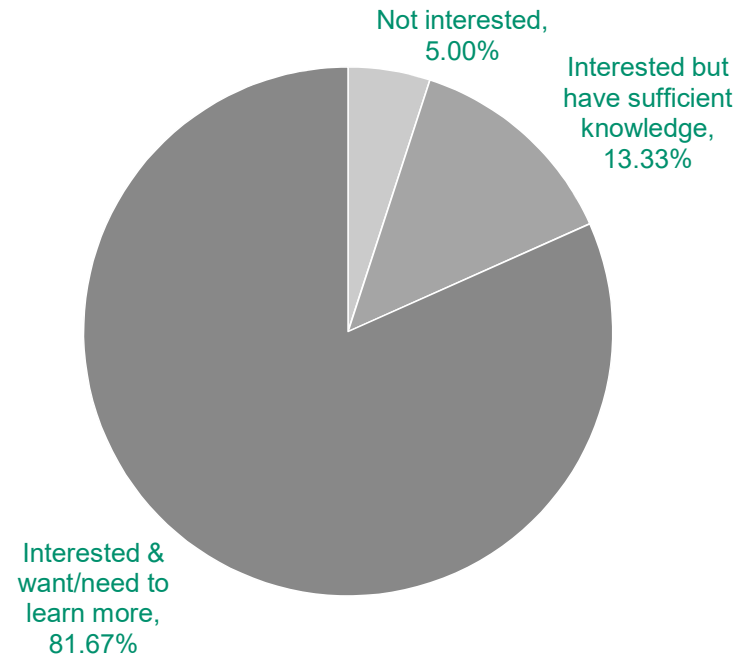
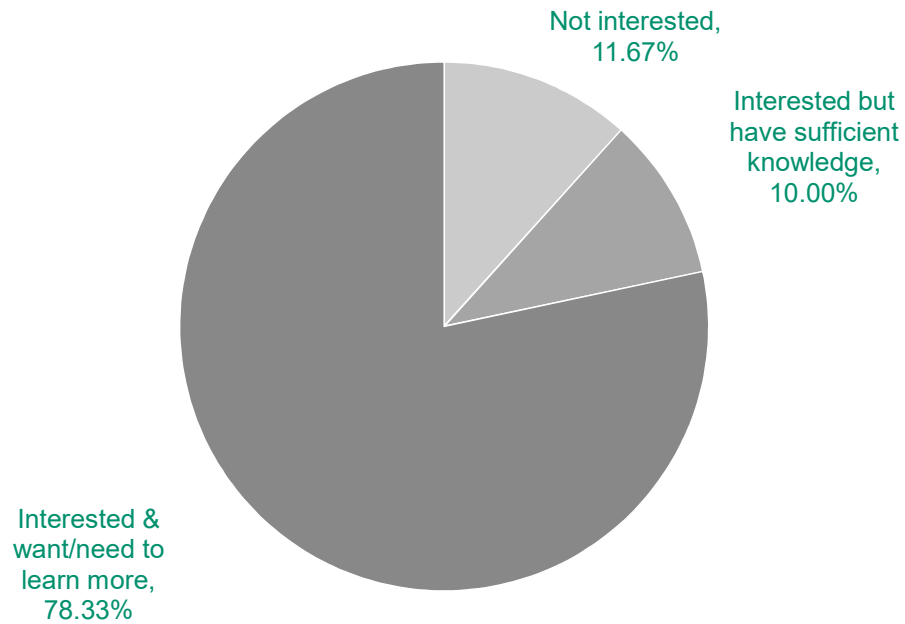
*Immunosuppression withdrawal/minimization:
Which to try, who to try it for, and how to do it*

*Organ allocation: Defining the rights of children to transplant,
developing consistency between the different organs in terms of
pediatric priorities, and developing a strategy to implement new
allocation policies*

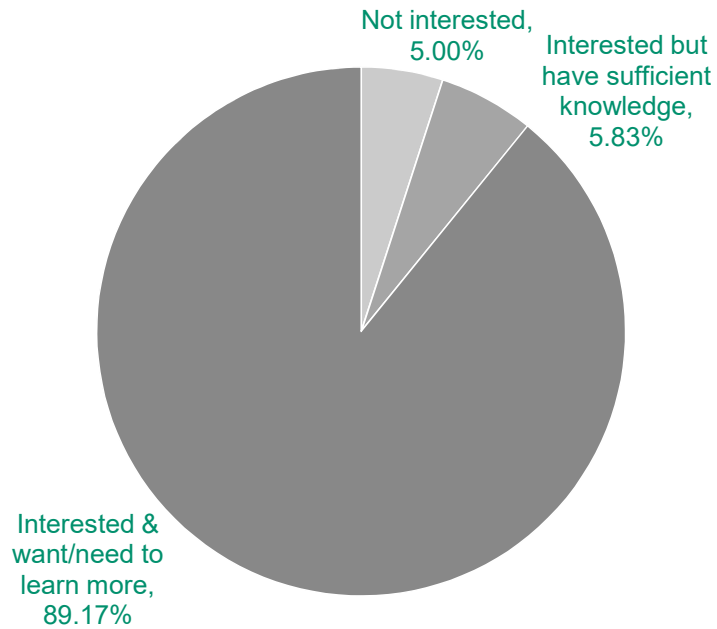


Managing recurrent diseases post-transplant

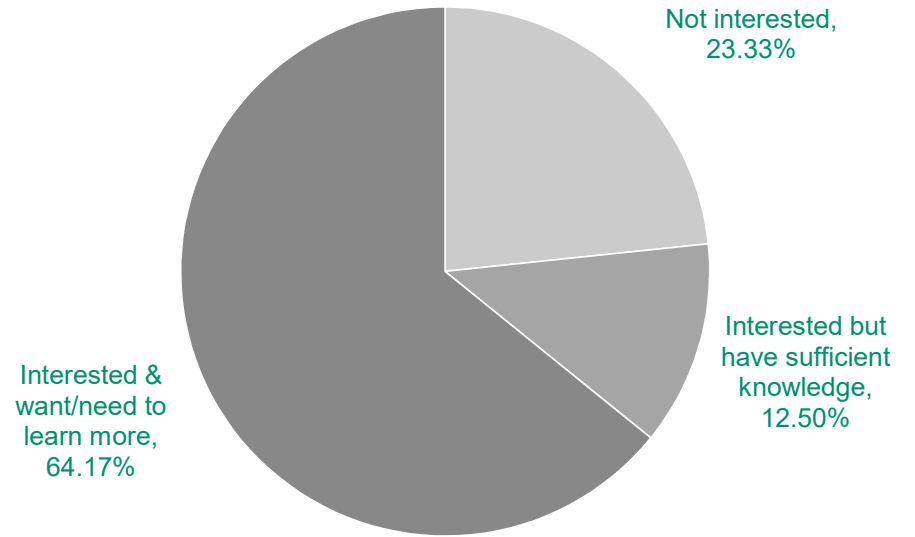
Infectious disease issues: Prevention of infection (resistant infections) in hospitalized transplant patients and best strategies for maximizing vaccination and vaccination response pre- and post-solid organ transplant



Newer immunosuppressive medications in transplantation and for the treatment of allograft rejection

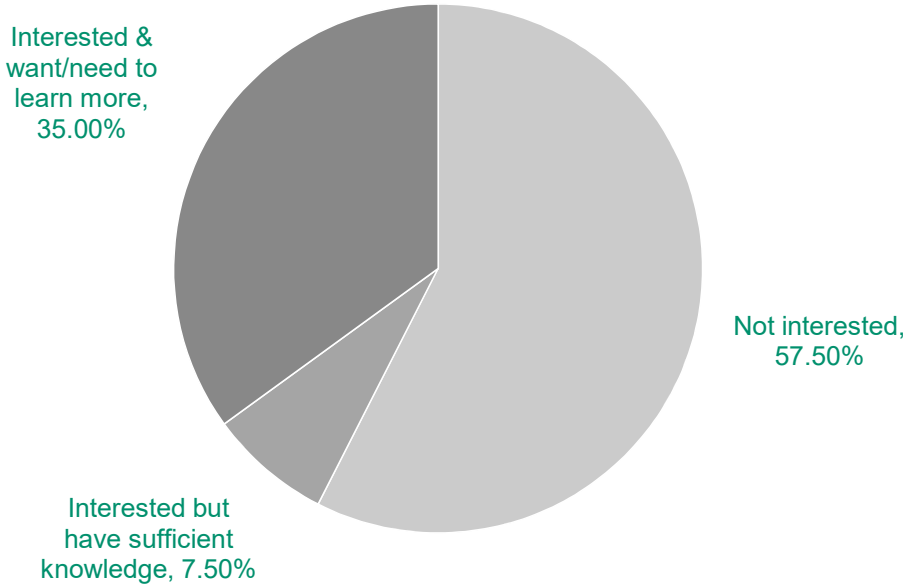


Optimizing sexual health and normal maturation after transplantation- appropriate screening, education and follow up

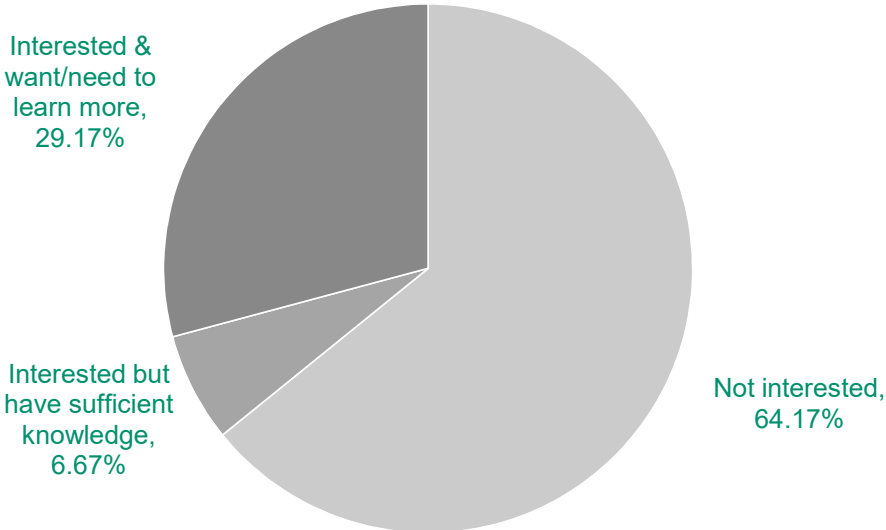


2020 Education Needs Assessment: Specialty Pediatrics Topics

Cardiology - Chronic infections after cardiac transplantation

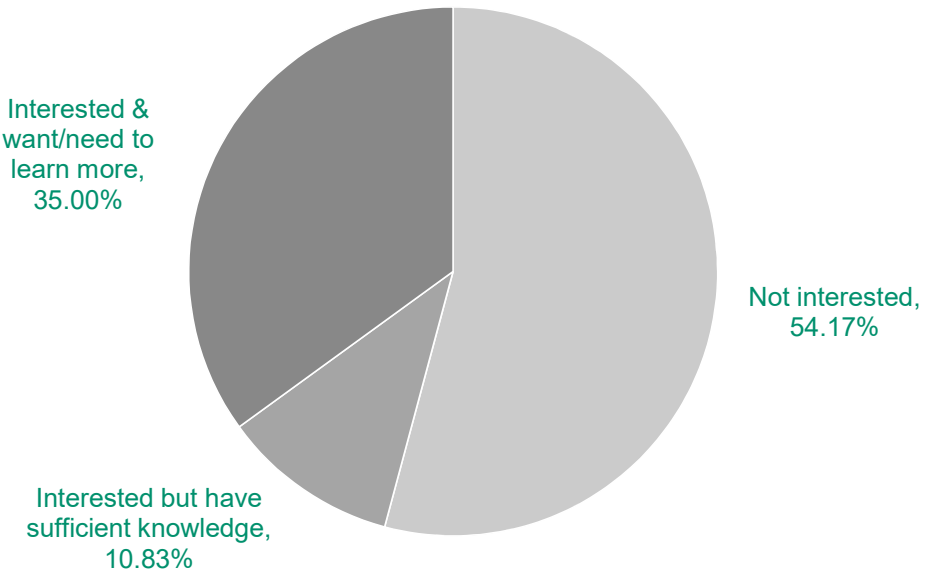
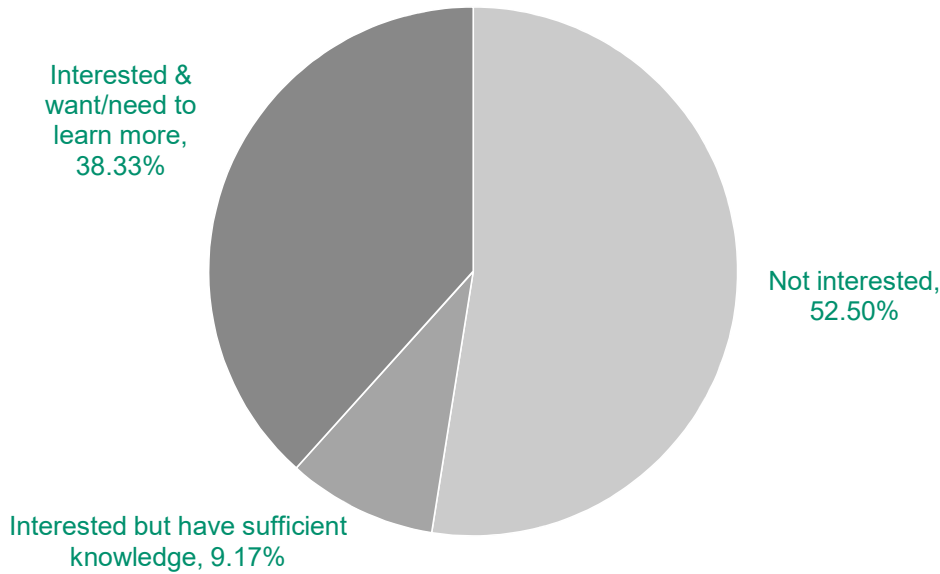


Cardiology - Early predictor of cardiac allograft vasculopathy



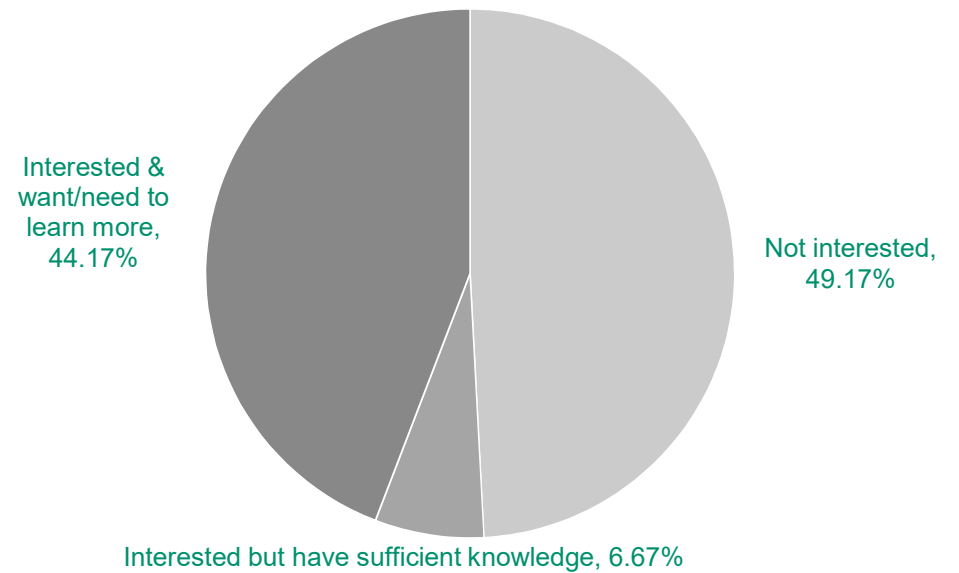
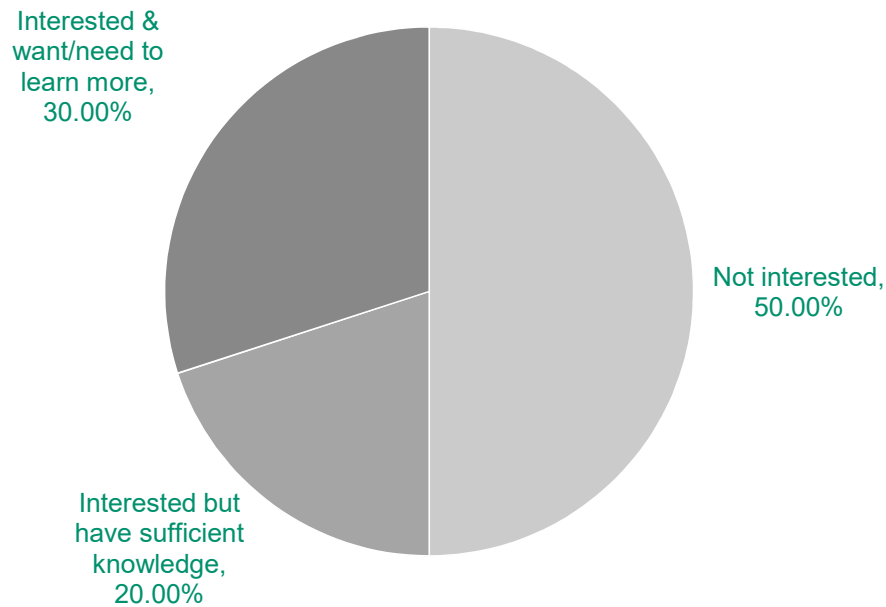
Cardiology - Use of devices as a bridge to transplantation

Gastroenterology/Hepatology - How to optimize the potential of splitting suitable organs to maximize utility of donated livers



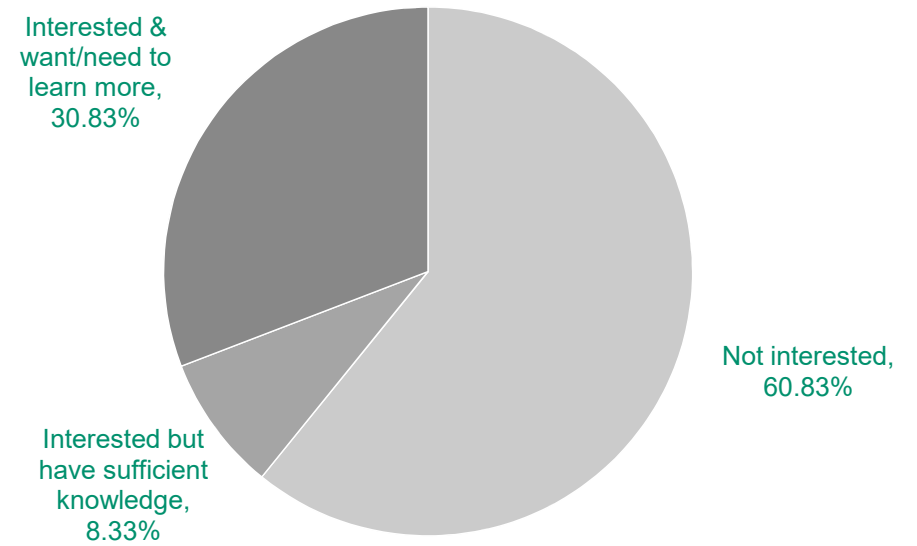
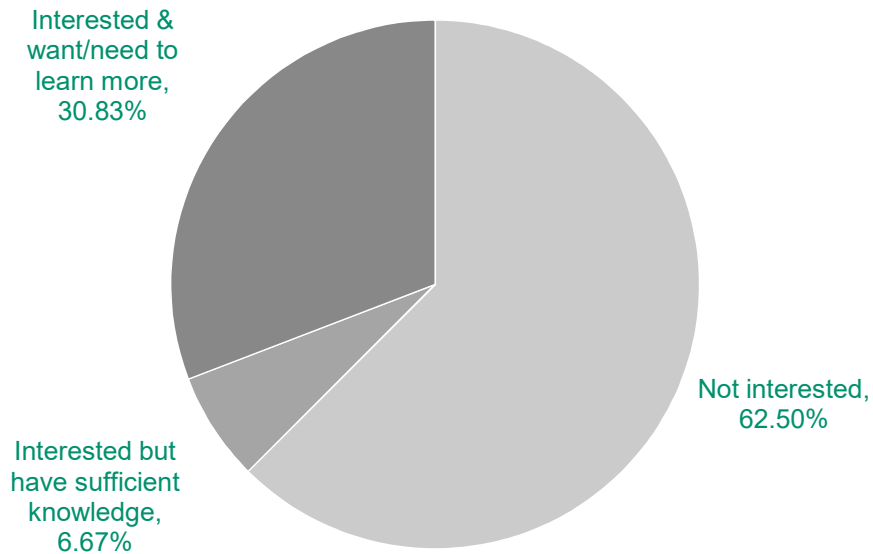
Gastroenterology/Hepatology - Referral for liver transplantation: Why, when and how best to do it

Gastroenterology/Hepatology - Role of extracorporeal support (MARS et al) as a bridge to liver transplantation



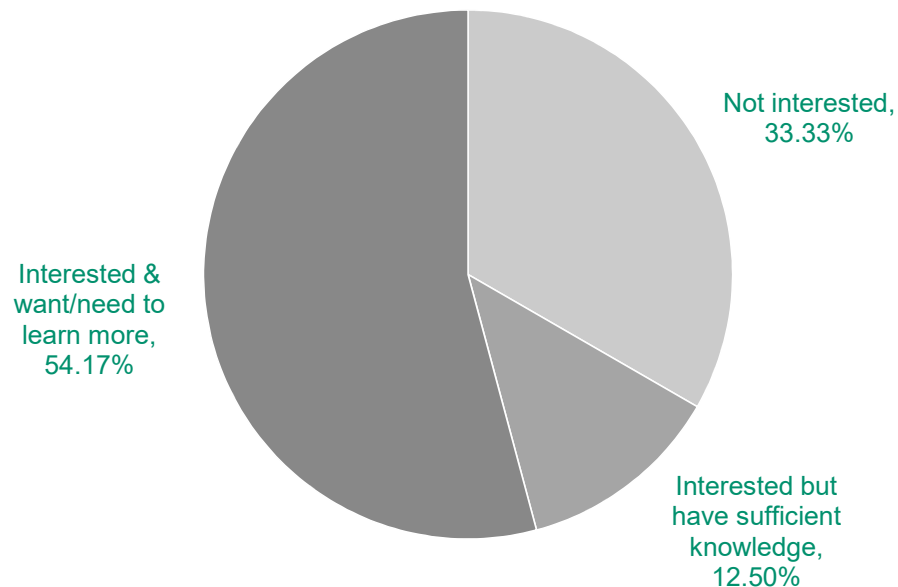
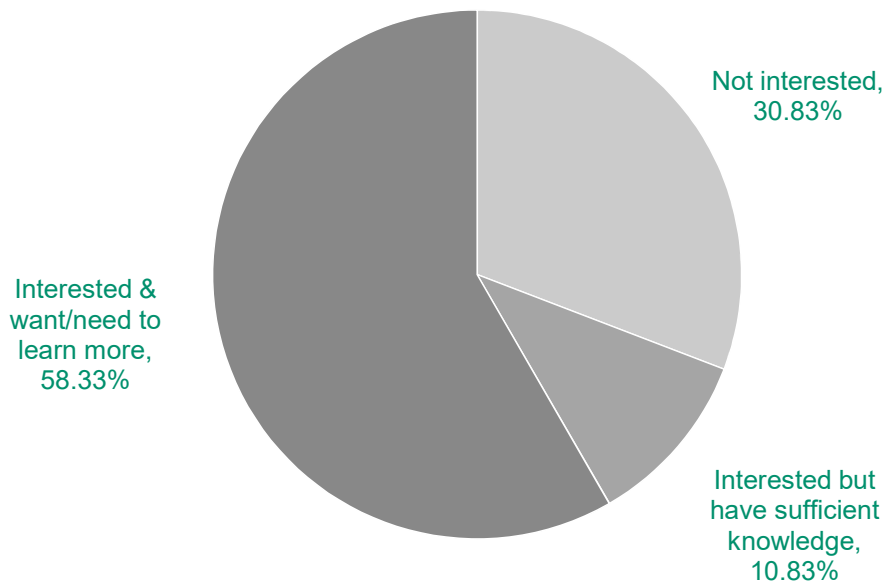
*Intestinal - Evolving indications for intestine transplantation
– e.g. is there a quality of life indication?*

*Intestinal - When should a liver be included with an
intestinal transplant?*



Nephrology - Examine pediatric aspects of paired kidney donation and the involvement of pediatric candidates in PKD schemes

Nephrology - The role of dialysis in the peri-operative management of the non-renal solid organ transplant recipient



Pulmonology - Biomarkers for rejection and/or graft failure

Pulmonology - Infectious disease considerations for pediatric lung transplantation

